

logo

NTDB id 413 AAK55817.1 141..845()	MKEILKTLTEAMTLPEDSYSEQDAEFLEIFIEEIEEIFVDLQPLINKWMQSENIATLTEIRRHFTLKGSGRMIGAKSSAELAWT	0
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	MKEILKTLTEAMTLPEDSYSEQDAEFLEIFIEEIEEIFVDLQPLINKWMQSENIATLTEIRRHFTLKGSGRMIGAKSSAELAWT	85
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 413 AAK55817.1 141..845()	VEDTLNRVINQSLQLTPTIQSYVQLVFKFYFLKLVDNFKQKRAHTLDFRPLILLGQQQLQQQSLEPALEEELLQLSHTLMAETVTG	0
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	VEDTLNRVINQSLQLTPTIQSYVQLVFKFYFLKLVDNFKQKRAHTLDFRPLILLGQQQLQQQSLEPALEEELLQLSHTLMAETVTG	170
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 413 AAK55817.1 141..845()	LELDYIEQDSLAEPIIQATHTEIEINLDETTLTFMEEAAEHLATIHQFLDQELHQYDSYNALIRALHTLRGSSAMAQVETIFEAS	0
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	LELDYIEQDSLAEPIIQATHTEIEINLDETTLTFMEEAAEHLATIHQFLDQELHQYDSYNALIRALHTLRGSSAMAQVETIFEAS	255
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 413 AAK55817.1 141..845()	TKVEHLFKILLQEELSSHSEEILLQYREFVRDSLELLSRYSSSEQLEARLLQFNQSWDAYVEQHGDRDPLMPSHGLVSQLLQ	0
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	TKVEHLFKILLQEELSSHSEEILLQYREFVRDSLELLSRYSSSEQLEARLLQFNQSWDAYVEQHGDRDPLMPSHGLVSQLLQ	340
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 413 AAK55817.1 141..845()	LDVSELLDAELDFEKGIRNEFPDYLERLSEQADLLLQHTHSQAMLGLHEYTSQLKESYEVLLDKPALLQSDYIFEIYQKAHQQLI	0
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	LDVSELLDAELDFEKGIRNEFPDYLERLSEQADLLLQHTHSQAMLGLHEYTSQLKESYEVLLDKPALLQSDYIFEIYQKAHQQLI	425
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	QLFDALAAGQVRGVVKQHQSILEELKLYTQYTPDISNDLPQQDSTSFEPYINIEPEPEVVATVENFSDSADWAVLGQSVQQDRQY	510
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	ISSTQVNRNFDADLLDIFLEEAEEELLEGGIDTDLNIWVGEQENFAALNNLMRYLHTLKGGANMVQATYLGIIAHELESIIYERLIQK	595
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus	.....	

logo

NTDB id 413 AAK55817.1 141..845()	QLVVTSDLIDFIRLVQDDLADRLQIMREQQLDYAAPYTINALKRAGQNSNFQPLPVVEAFDAESEVFSEQKVISEIIIDEIPVEL	0
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	QLVVTSDLIDFIRLVQDDLADRLQIMREQQLDYAAPYTINALKRAGQNSNFQPLPVVEAFDAESEVFSEQKVISEIIIDEIPVEL	680
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

	EPALAELETHHDQVFDTAVTELATPVEMITTVTSQENEVAANEQDIEAVVEQTFLEEATELLEMAESLLKQWFEQRTNRSILLQL	
NTDB id 413 AAK55817.1 141..845( )	.....	0
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	EPALAELETHHDQVFDTAVTELATPVEMITTVTSQENEVAANEQDIEAVVEQTFLEEATELLEMAESLLKQWFEQRTNRSILLQL	765
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 413 AAK55817.1 141..845()	QRAVHSLKGGARMVGL EAVQA IAYQLENAFEQFALHHFNSNIYDHLLES AIAWLKDAIFNHNYQHFDGLQQSLENIQFFETTIQI	0
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	QRAVHSLKGGARMVGL EAVQA IAYQLENAFEQFALHHFNSNIYDHLLES AIAWLKDAIFNHNYQHFDGLQQSLENIQFFETTIQI	850
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 413 AAK55817.1 141..845()	PTKLTRADLFSSEPVMTFIQGDGTEPPPPMGAWEQTERLDQNNEMIRVSADLIEKMIDLSGENSINRSRIEMDLSQFSHTLVEME	0
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	PTKLTRADLFSSEPVMTFIQGDGTEPPPPMGAWEQTERLDQNNEMIRVSADLIEKMIDLSGENSINRSRIEMDLSQFSHTLVEME	935
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 413 AAK55817.1 141..845()	LAIQRLADQLRRMEGELETQIIAKHGI EHSRYTDFDPLEMDQYSSLNQLSKSLAESASDLVDFKNTLSDKIRDTESLLLQQSRIQ	0
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	LAIQRLADQLRRMEGELETQIIAKHGI EHSRYTDFDPLEMDQYSSLNQLSKSLAESASDLVDFKNTLSDKIRDTESLLLQQSRIQ	1020
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 413 AAK55817.1 141..845()	AEIQEGLMRTRLVPFSRLLPRLQRIVRQTSTALNRP AELFVNNT EGELDRNII LERLVTPL EHM LRNAIDHGLEDRAQRQQANKPE	0
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	AEIQEGLMRTRLVPFSRLLPRLQRIVRQTSTALNRP AELFVNNT EGELDRNII LERLVTPL EHM LRNAIDHGLEDRAQRQQANKPE	1105
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 413 AAK55817.1 141..845()	TGRIELNIQRQGTDVVVVFSDDGQGIDVEKVRQKALLAGLIKPEQDLEQQDILQLIFHPGLSTAEQVTQISGRGVGLDVVQSDIK	0
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	TGRIELNIQRQGTDVVVVFSDDGQGIDVEKVRQKALLAGLIKPEQDLEQQDILQLIFHPGLSTAEQVTQISGRGVGLDVVQSDIK	1190
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 413 AAK55817.1 141..845()	SLGGHVSVESVYGQGTTFITIRVPTTVAVSDALMVKVADQQFAIPLAQIDRIIRVSPASLEQYFESPQELFEYENKRYPLRYLSEF	0
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	SLGGHVSVESVYGQGTTFITIRVPTTVAVSDALMVKVADQQFAIPLAQIDRIIRVSPASLEQYFESPQELFEYENKRYPLRYLSEF	1275
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 413 AAK55817.1 141..845()	VGNQPI PRLNGVMYSLPVLMIKANNGQTVALLVDQLIGSRAQIVVKPIGQQFSSIGAIAGATILGDGQVCLILDGQNIARQIQST	0
NTDB id 1047 HON27 RS03110 WP 000389061.1	.....	0
NTDB id 1046 HON27 RS03130 WP 168726941.1	VGNQPI PRLNGVMYSLPVLMIKANNGQTVALLVDQLIGSRAQIVVKPIGQQFSSIGAIAGATILGDGQVCLILDGQNIARQIQST	1360
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	0
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	0
consensus		

logo

NTDB id 413 AAK55817.1 141..845( )	.....	67
NTDB id 1047 HON27 RS03110 WP 000389061.1	MEDAFQNLKVMVIDDSKTIRRTAETLIQREGCEVITAVDGFALSKIAEANPDIVFVDIMPRLDGYCTCALI	73
NTDB id 1046 HON27 RS03130 WP 168726941.1	QRHKQLSEAVYRQRESDERRLIMIVDDSVTVRKVTSRLLEERQGYDVVTAQDGVDATEQENIKPDLMLLDIEMPRMDGFEVLNLV	1445
NTDB id 25332 CYB RS09225 WP 011433531.1	MSRVLVVEDSQSQREMISSKLLQENGFEVMTVEDGVEAVEAVKQNKPDILVLDIVMPRMNGYEVCRLL	67
NTDB id 1417 SGL RS04200 WP 014407071.1	MNAVLVVEDSSSQREMISSGLKDHWQVTTIACDGVEALEKIQNFS PDLVVLDIVMPRMNGYEVCRRI	67
consensus	* **** * ! * * * * * * * * ! * * * * * * * * ! * * * * * * * * ! * * * * * * * *	

logo

NTDB id 413 AAK55817.1 141..845()	KSDPNTQNYPIIMLSSKGG EEDRYWFRQ GADAYIAKPFQELVGTIKQLLR	149
NTDB id 1047 HON27 RS03110 WP 000389061.1	KNSQNYQNIPVIMSSKDGLFDQAKGRVVGSD EYITKPFKDELINAIRNHVSS	127
NTDB id 1046 HON27 RS03130 WP 168726941.1	RHHDMHQYMPIIMITSRTGEKHRERAFSLGVSQYMGKPFQEEELLENIDALLVAFESEVKS	1506
NTDB id 25332 CYB RS09225 WP 011433531.1	KADPLTQKTPIVMCSSKGEEFDRYWGIRQGADAYIAKPFQPMELVGTIKQLLRG	121
NTDB id 1417 SGL RS04200 WP 014407071.1	KSDPKTKNVPVIMCSSKGEEFDRFWGMRQGADAYIAKPFQPMELVGTIKQLLRN	121
consensus	* ** * ! * * ! * * * * * * * * * ! * * * * * * * * ! * * * * * * * *	

logo

NTDB id 413 AAK55817.1 141..845()	AKKYGEELDLTHREFELLYHLASHTGQVITREHLLLETVWG YDYFGDVRTVDVTVRRRLREKIEDTPSRPEYILTRRGVGYMRNNA	234
NTDB id 1047 HON27 RS03110 WP 000389061.1	AKKYGEELDLTHREFELLYHLASHTGQVITREHLLLETVWG YDYFGDVRTVDVTVRRRLREKIEDTPSRPEYILTRRGVGYMRNNA	127
NTDB id 1046 HON27 RS03130 WP 168726941.1	.....	1506
NTDB id 25332 CYB RS09225 WP 011433531.1	.....	121
NTDB id 1417 SGL RS04200 WP 014407071.1	.....	121
consensus		

<0

logo

NTDB id 413 AAK55817.1 141..845()	*	234
NTDB id 1047 HON27 RS03110 WP 000389061.1	.	127
NTDB id 1046 HON27 RS03130 WP 168726941.1	.	1506
NTDB id 25332 CYB RS09225 WP 011433531.1	.	121
NTDB id 1417 SGL RS04200 WP 014407071.1	.	121
consensus		

 non conserved
 similar
 $\geq 50\%$ conserved