

NTDB id 602 KW2 RS03060 WP 011834647.1	MGYL	VPTVIEQSSRGERAYDIYSRLKDRIMLTGPVED	GMANSIIAQLFLDAQDN	TKDIYLYVNTPGGSVSAG	75
NTDB id 611 V4T04 RS07970 WP 003129593.1	MGYL	VPTVIEQSSRGERAYDIYSRLKDRIMLTGPVED	GMANSIIAQLFLDAQDN	TKDIYLYVNTPGGSVSAG	75
NTDB id 330 STU RS11365 WP 002949732.1		MIPVVIEQTSRGRERSYDIYSRLKDRIMLTGP	TEDNMANSIIAQLFLDAQDN	TKDIYLYVNTPGGSVSAG	72
NTDB id 298 STER RS01925 WP 002949732.1		MIPVVIEQTSRGRERSYDIYSRLKDRIMLTGP	TEDNMANSIIAQLFLDAQDN	TKDIYLYVNTPGGSVSAG	72
NTDB id 282 KZH43 RS03215 WP 000613477.1		MIPVVIEQTSRGRERSYDIYSRLKDRIMLTGPVEDNMANS	VIAQLFLDAQDN	STKDIYLYVNTPGGSVSAG	72
NTDB id 246 SPD RS03495 WP 000613477.1		MIPVVIEQTSRGRERSYDIYSRLKDRIMLTGPVEDNMANS	VIAQLFLDAQDN	STKDIYLYVNTPGGSVSAG	72
NTDB id 244 SPR RS03300 WP 000613477.1		MIPVVIEQTSRGRERSYDIYSRLKDRIMLTGPVEDNMANS	VIAQLFLDAQDN	STKDIYLYVNTPGGSVSAG	72
NTDB id 242 SP RS03655 WP 000613477.1		MIPVVIEQTSRGRERSYDIYSRLKDRIMLTGPVEDNMANS	VIAQLFLDAQDN	STKDIYLYVNTPGGSVSAG	72
NTDB id 376 SMU RS07595 WP 255262720.1	MELKEKYS	MIPVVIEQTSRGRERSYDIYSRLKDRIMLTGPVEDNMANS	VIAQLFLDAQDN	TKDIYLYINSPGGSVSAG	80
NTDB id 446 SpyM6JRS4 RS01695 WP 002985850.1		MIPVVIEQTSRGRERSYDIYSRLKDRIMLTGPVEDNMANS	VIAQLFLDAQDN	TKDIYLYVNTPGGSVSAG	72
NTDB id 445 SPYM3 RS01720 WP 002985850.1		MIPVVIEQTSRGRERSYDIYSRLKDRIMLTGPVEDNMANS	VIAQLFLDAQDN	TKDIYLYVNTPGGSVSAG	72
NTDB id 1223 Cj0192c YP 002343650.1	MFIP	YVIEKSSRGRERSYDIYSRLKDRIMLTGP	THDELAASIVIAQLFLFAEDP	TKDIYLYINSPGGVITSG	73
NTDB id 397050 GH772 RS04800 WP 001049162.1	MNL	IPTVIEQTNRGERAYDIYSRLKDRIMLTGSAIDDNVANSIVSQLLFLAESQD	PEKDIHTYINSPGGSITAG	74	
NTDB id 86 BSU 34540 NP 391334.1	MNL	IPTVIEQTNRGERAYDIYSRLKDRIMLTGSAIDDNVANSIVSQLLFLAESQD	PEKEISLYINSPGGSITAG	74	
consensus	***	*****	*****	*****	

NTDB id	602	KW2	RS03060	WP	011834647.1	LAIVDTMNFIK	SDVQTIVMGMAASMGTVIASSGT	TGKGRFMLPNAEYL	LHQPMGGAG	CGTQQTDMAI	VAEQLLKRKRLEQ	155
NTDB id	611	V4T04	RS07970	WP	003129593.1	LAIVDTMNFIK	SDVQTIVMGMAASMGTVIASSGT	TGKGRFMLPNAEYL	LHQPMGGTG	CQTQQTDMAI	VAEQLLKRKRLEQ	155
NTDB id	330	STU	RS11365	WP	002949732.1	LAIVDTMNFIK	SDVQTIVMGMAASMGTVIASSGT	TGKGRFMLPNAEYMIHQP	MGGTGGGT	QTTDMAIAAEHLKTRNNLEQ	152	
NTDB id	298	STER	RS01925	WP	002949732.1	LAIVDTMNFIK	SDVQTIVMGMAASMGTVIASSGT	TGKGRFMLPNAEYMIHQP	MGGTGGGT	QTTDMAIAAEHLKTRNNLEQ	152	
NTDB id	282	KZH43	RS03215	WP	000613477.1	LAIVDTMNFIK	ADVQTIVMGMAASMGTVIASSGA	KGKRFMLPNAEYMIHQP	MGGTGGGT	QTTDMAIAAEHLKTRNMLEK	152	
NTDB id	246	SPD	RS03495	WP	000613477.1	LAIVDTMNFIK	ADVQTIVMGMAASMGTVIASSGA	KGKRFMLPNAEYMIHQP	MGGTGGGT	QTTDMAIAAEHLKTRNMLEK	152	
NTDB id	244	SPR	RS03300	WP	000613477.1	LAIVDTMNFIK	ADVQTIVMGMAASMGTVIASSGA	KGKRFMLPNAEYMIHQP	MGGTGGGT	QTTDMAIAAEHLKTRNMLEK	152	
NTDB id	242	SP	RS03655	WP	000613477.1	LAIVDTMNFIK	ADVQTIVMGMAASMGTVIASSGA	KGKRFMLPNAEYMIHQP	MGGTGGGT	QTTDMAIAAEHLKTRNMLEK	152	
NTDB id	376	SMU	RS07595	WP	255262720.1	LAIVDTMNFIK	SDVQTIVMGMAASMGTVIASSGA	KGKRFMLPNAEYL	LHQPMGGTGGGT	QSSDMAIAEQLLKTRKKLEK	160	
NTDB id	446	SpyM6JRS4	RS01695	WP	002985850.1	LAIVDTMNFIK	ADVQTIVMGMAASMGTVIASSGT	TGKGRFMLPNAEYMIHQP	MGGTGGGT	QTTDMAIAAEHLKTRHRLEK	152	
NTDB id	445	SPYM3	RS01720	WP	002985850.1	LAIVDTMNFIK	ADVQTIVMGMAASMGTVIASSGT	TGKGRFMLPNAEYMIHQP	MGGTGGGT	QTTDMAIAAEHLKTRHRLEK	152	
NTDB id	1223	Cj0192c	YP	002343650.1	FSTIYDTMNYIKP	PDVCTICIGQAASMGAFILSCGAEGKRFALPN	SRI	MIHQPLGARG..	QATDIEIQAKEILRLKTIIND	151		
NTDB id	397050	GH772	RS04800	WP	001049162.1	MAIYDTMQFIKPQVST	ICIGMAASMGAFLLAAGEKGRYALPNSEV	MIHQPLGGAQG..	QATEIEIAAKRIILFLREKLNQ	152		
NTDB id	86	BSU	34540	NP	391334.1	MAIYDTMQFIKPQVST	ICIGMAASMGAFLLAAGEKGRYALPNSEV	MIHQPLGGAQG..	QATEIEIAAKRIILLRDKLNK	152		
consensus						** * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	

NTDB id 602 KW2 RS03060 WP 011834647.1	ILADNSNRSL	EQTHKDAERD	HWMDAK	ETLEYGFIDEIM	NNSLK	199	
NTDB id 611 V4T04 RS07970 WP 003129593.1	ILADNSNRSL	EQTHKDAERD	HWMDAK	ETLEYGFIDEIM	NNSLK	199	
NTDB id 330 STU RS11365 WP 002949732.1	ILADNSGQP	TEKVHVDAERD	NWMSAQ	ETLEYGFIDEIM	TNNQLK	196	
NTDB id 298 STER RS01925 WP 002949732.1	ILADNSGQP	TEKVHVDAERD	NWMSAQ	ETLEYGFIDEIM	TNNQLK	196	
NTDB id 282 KZH43 RS03215 WP 000613477.1	ILAE NSGQ	SMEKVHADAERD	NWMSAQ	ETLEYGFIDEIM	ANNLSN	196	
NTDB id 246 SPD RS03495 WP 000613477.1	ILAE NSGQ	SMEKVHADAERD	NWMSAQ	ETLEYGFIDEIM	ANNLSN	196	
NTDB id 244 SPR RS03300 WP 000613477.1	ILAE NSGQ	SMEKVHADAERD	NWMSAQ	ETLEYGFIDEIM	ANNLSN	196	
NTDB id 242 SP RS03655 WP 000613477.1	ILAE NSGQ	SMEKVHADAERD	NWMSAQ	ETLEYGFIDEIM	ANNLSN	196	
NTDB id 376 SMU RS07595 WP 255262720.1	ILSDNSGK	TIKQTHKDAERD	YWD	AKETLKYGFIDEIM	NNNELK	204	
NTDB id 446 SpyM6JRS4 RS01695 WP 002985850.1	ILAQNAGK	TIKQTHKDAERD	YWMSAE	ETLAYGFIDEIM	NNNELK	196	
NTDB id 445 SPYM3 RS01720 WP 002985850.1	ILAQNAGK	TIKQTHKDAERD	YWMSAE	ETLAYGFIDEIM	NNNELK	196	
NTDB id 1223 Cj0192c YP 002343650.1	ILAKNTIK	QKVAKIAK	DTDRDNFM	TA	EKALEYGLIDK	VLEKSFK.. 194	
NTDB id 397050 GH772 RS04800 WP 001049162.1	ILADRTGQ	PLEVLQRD	TD	DRDNFM	TA	EKALEYGLIDK	IFTNR... 193
NTDB id 86 BSU 34540 NP 391334.1	VLAERTGQ	PLEVLQRD	TD	DRDNFM	TA	EKALEYGLIDK	ILTHTEDKK 197
consensus	* * *	*****	*****	*****	*****	*****	

 non conserved
 similar
 $\geq 50\%$ conserved