

NTDB id	602	KW2	RS03060	WP	011834647.1	MGYL	VPTVIEQSSRGERAYDIYSRLKDRIIMLTGPVEDGMANS	IAQLFLDQAQDNTKDIIYLVNTPGGSVSAG	75
NTDB id	611	V4T04	RS07970	WP	003129593.1	MGYL	VPTVIEQSSRGERAYDIYSRLKDRIIMLTGPVEDGMANS	IAQLFLDQAQDNTKDIIYLVNTPGGSVSAG	75
NTDB id	330	STU	RS11365	WP	002949732.1	MIPV	VIEQTSGERSYDIYSRLKDRIIMLTGTIEDNMANS	IAQLFLDQAQDNTKDIIYLVNTPGGSVSAG	72
NTDB id	298	STER	RS01925	WP	002949732.1	MIPV	VIEQTSGERSYDIYSRLKDRIIMLTGTIEDNMANS	IAQLFLDQAQDNTKDIIYLVNTPGGSVSAG	72
NTDB id	282	KZH43	RS03215	WP	000613477.1	MIPV	VIEQTSGERSYDIYSRLKDRIIMLTGPVEDNMANS	IAQLFLDQAQDSTKDIIYLVNTPGGSVSAG	72
NTDB id	246	SPD	RS03495	WP	000613477.1	MIPV	VIEQTSGERSYDIYSRLKDRIIMLTGPVEDNMANS	IAQLFLDQAQDSTKDIIYLVNTPGGSVSAG	72
NTDB id	244	SPR	RS03300	WP	000613477.1	MIPV	VIEQTSGERSYDIYSRLKDRIIMLTGPVEDNMANS	IAQLFLDQAQDSTKDIIYLVNTPGGSVSAG	72
NTDB id	242	SP	RS03655	WP	000613477.1	MIPV	VIEQTSGERSYDIYSRLKDRIIMLTGPVEDNMANS	IAQLFLDQAQDSTKDIIYLVNTPGGSVSAG	72
NTDB id	82750	H7674	RS07345	WP	011284532.1	MIPV	VIEQTSGERSYDIYSRLKDRIIMLTGPVEDNMANS	IAQLFLDQAQDNTKDIIYLVNTPGGSVSAG	72
NTDB id	446	SpyM6JRS4	RS01695	WP	002985850.1	MIPV	VIEQTSGERSYDIYSRLKDRIIMLTGPVEDNMANS	IAQLFLDQAQDNTKDIIYLVNTPGGSVSAG	72
NTDB id	445	SPYM3	RS01720	WP	002985850.1	MIPV	VIEQTSGERSYDIYSRLKDRIIMLTGPVEDNMANS	IAQLFLDQAQDNTKDIIYLVNTPGGSVSAG	72
NTDB id	376	SMU	RS07595	WP	255262720.1	MELKEKYS	MIPVVIEQTSGERSYDIYSRLKDRIIMLTGPVEDNMANS	IAQLFLDQAQDNTKDIIYLYINSPPGVSAG	80
NTDB id	1223	Cj0192c	YP	002343650.1	MFIPY	VIEKSSRGRSYDIYSRLKDRIIMLSGEIHDELAAS	IVAQLLFLEAEDPTKDIIYLYINSPGGVITSG	73	
NTDB id	86	BSU	34540	NP	391334.1	MNL	IPTVIEQTNRGERAYDIYSRLKDRIIMLGSAIDDNVANS	IVSQLLFLAAEDPEKEISLYINSPGGISITAG	74
consensus							**!*!*****!!*!!!!!!!!!!!!!!**!*!*****!!*!!!!!!!!!!!!!!		

NTDB id	602	KW2 RS03060 WP 011834647.1	LAIVDTMNFIKS	DVQTI VMGMAASMGTTIASSGT	TGKGRFMLPNAEYL	IHQPMGGAGQGQTQQTDMAIVAEQLLKRKRLEQ	155
NTDB id	611	V4T04 RS07970 WP 003129593.1	LAIVDTMNFIKS	DVQTI VMGMAASMGTTIASSGT	TGKGRFMLPNAEYL	IHQPMGGTGQGQTQQTDMAIVAEQLLKRKRLEQ	155
NTDB id	330	STU RS11365 WP 002949732.1	LAIVDTMNFIKS	DVQTI VMGMAASMGTTIASSGT	TGKGRFMLPNAEYMIHQPMGGTGGGTQQTDMAIAAAEHLLKTRNNLEQ	152	
NTDB id	298	STER RS01925 WP 002949732.1	LAIVDTMNFIKS	DVQTI VMGMAASMGTTIASSGT	TGKGRFMLPNAEYMIHQPMGGTGGGTQQTDMAIAAAHLLKTRNNLEQ	152	
NTDB id	282	KZH43 RS03215 WP 000613477.1	LAIVDTMNFIKA	DVQTI VMGMAASMGTVIASSGA	KGKRFLMPNAEYMIHQPMGGTGGGTQQTDMAIAAAEHLLKTRNTLEK	152	
NTDB id	246	SPD RS03495 WP 000613477.1	LAIVDTMNFIKA	DVQTI VMGMAASMGTVIASSGA	KGKRFLMPNAEYMIHQPMGGTGGGTQQTDMAIAAAEHLLKTRNTLEK	152	
NTDB id	244	SPR RS03300 WP 000613477.1	LAIVDTMNFIKA	DVQTI VMGMAASMGTVIASSGA	KGKRFLMPNAEYMIHQPMGGTGGGTQQTDMAIAAAEHLLKTRNTLEK	152	
NTDB id	242	SP RS03655 WP 000613477.1	LAIVDTMNFIKA	DVQTI VMGMAASMGTVIASSGA	KGKRFLMPNAEYMIHQPMGGTGGGTQQTDMAIAAAEHLLKTRNTLEK	152	
NTDB id	82750	H7674 RS07345 WP 011284532.1	LAIVDTMNFIKA	DVQTI VMGMAASMGTVIASSGT	TGKGRFMLPNAEYMIHQPMGGTGGGTQQTDMAIAAAHLLKTRHRLEK	152	
NTDB id	446	SpyM6JRS4 RS01695 WP 002985850.1	LAIVDTMNFIKA	DVQTI VMGMAASMGTVIASSGT	TGKGRFMLPNAEYMIHQPMGGTGGGTQQTDMAIAAAEHLLKTRHRLEK	152	
NTDB id	445	SPYM3 RS01720 WP 002985850.1	LAIVDTMNFIKA	DVQTI VMGMAASMGTVIASSGT	TGKGRFMLPNAEYMIHQPMGGTGGGTQQTDMAIAAAEHLLKTRHRLEK	152	
NTDB id	376	SMU RS07595 WP 255262720.1	LAIVDTMNFIKS	DVQTI VMGTAASMGTTIASSGA	KGKRFLMPNAEYL I HQPMGGTGGGTQQSDMAIAAEEQLLKTRKKLEK	160	
NTDB id	1223	Cj0192c YP 002343650.1	FSLIDTMNYIKP	DVCTICIGQAASMGAFLLSCGAE	GKRFALPNSSRI MIHQPLGGARG.. QATDIEIQAKEILRLKITLND	151	
NTDB id	86	BSU 34540 NP 391334.1	MAYIDTMCFIKPKVS	TICIGMAASMGAFLLAAGE	EKGKYALPNSEVMIHQPLGGAQG.. QATEIEIAAKRILLRLDKLNK	152	
consensus			**!!**!!!!!! *	*!*****!!!**!!*	*!!!!!!!!!!!!!!!!*!	*!!!!!!!!!!!!!!!!*!* *!*	

NTDB id 602 KW2 RS03060 WP 011834647.1	ILADNSNRSLQIHKDAERDHWMDAKETLEYGFIDEIMENNSLK.	199
NTDB id 611 V4T04 RS07970 WP 003129593.1	ILADNSNRSLQIHKDAERDHWMDAKETLEYGFIDEIMENNSLK.	199
NTDB id 330 STU RS11365 WP 002949732.1	ILADNSGQPIEKVHVDAERDNWMSAQETLEYGFIDEIMTNNQLK.	196
NTDB id 298 STER RS01925 WP 002949732.1	ILADNSGQPIEKVHVDAERDNWMSAQETLEYGFIDEIMTNNQLK.	196
NTDB id 282 KZH43 RS03215 WP 000613477.1	ILAE NSGQSMEKVVHADAERDNWMSAQETLEYGFIDEIMANNSLN.	196
NTDB id 246 SPD RS03495 WP 000613477.1	ILAE NSGQSMEKVVHADAERDNWMSAQETLEYGFIDEIMANNSLN.	196
NTDB id 244 SPR RS03300 WP 000613477.1	ILAE NSGQSMEKVVHADAERDNWMSAQETLEYGFIDEIMANNSLN.	196
NTDB id 242 SP RS03655 WP 000613477.1	ILAE NSGQSMEKVVHADAERDNWMSAQETLEYGFIDEIMANNSLN.	196
NTDB id 82750 H7674 RS07345 WP 011284532.1	ILAQ NAGKTIKQIHKDAERDYWMSAEETLTYGFIDEIMENNELK.	196
NTDB id 446 SpyM6JRS4 RS01695 WP 002985850.1	ILAQ NAGKTIKQIHKDAERDYWMSAEETLAYGFIDEIMENNELK.	196
NTDB id 445 SPYM3 RS01720 WP 002985850.1	ILAQ NAGKTIKQIHKDAERDYWMSAEETLAYGFIDEIMENNELK.	196
NTDB id 376 SMU RS07595 WP 255262720.1	ILSDNSGKTIKQIHKDAERDYWMDAKETLK YGFIDEIMENNELK.	204
NTDB id 1223 Cj0192c YP 002343650.1	ILAKNTKQKVAKIAKDTERDFFMSAQEAK EYGLIDKVLKSFK.	194
NTDB id 86 BSU 34540 NP 391334.1	VLAERTGQPLEVIERDTRD NFKSAEEALEYGLIDKILTHTEDKK	197
consensus	*!***** * * * * ! * * * ! ! * * * ! * * * * *	

 non conserved
 similar
 $\geq 50\%$ conserved