

NTDB id	602	KW2 RS03060 WP 011834647.1	MGYL	VPTVIEQSSRGERAYDIYSRLKDRIIMLTGPVEDGMANSIIAQLFLDAQDN	TCKDIYLYVNTPGGSVSAG	75
NTDB id	611	V4T04 RS07970 WP 003129593.1	MGYL	VPTVIEQSSRGERAYDIYSRLKDRIIMLTGPVEDGMANSIIAQLFLDAQDN	TCKDIYLYVNTPGGSVSAG	75
NTDB id	330	STU RS11365 WP 002949732.1	MIPV	VIEQTSGRSYDIYSRLKDRIIMLTGPIEDNMANSIIAQLFLDAQDN	TCKDIYLYVNTPGGSVSAG	72
NTDB id	298	STER RS01925 WP 002949732.1	MIPV	VIEQTSGRSYDIYSRLKDRIIMLTGPIEDNMANSIIAQLFLDAQDN	TCKDIYLYVNTPGGSVSAG	72
NTDB id	282	KZH43 RS03215 WP 000613477.1	MIPV	VIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSIIAQLFLDAQDS	TCKDIYLYVNTPGGSVSAG	72
NTDB id	246	SPD RS03495 WP 000613477.1	MIPV	VIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSIIAQLFLDAQDS	TCKDIYLYVNTPGGSVSAG	72
NTDB id	244	SPR RS03300 WP 000613477.1	MIPV	VIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSIIAQLFLDAQDS	TCKDIYLYVNTPGGSVSAG	72
NTDB id	242	SP RS03655 WP 000613477.1	MIPV	VIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSIIAQLFLDAQDS	TCKDIYLYVNTPGGSVSAG	72
NTDB id	446	SpyM6JRS4 RS01695 WP 002985850.1	MIPV	VIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSIIAQLFLDAQDN	TCKDIYLYVNTPGGSVSAG	72
NTDB id	445	SPYM3 RS01720 WP 002985850.1	MIPV	VIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSIIAQLFLDAQDN	TCKDIYLYVNTPGGSVSAG	72
NTDB id	376	SMU RS07595 WP 255262720.1	MELKEKYS	MIPVVIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSIIAQLFLDAQDN	TCKDIYLYINSPGGSVSAG	80
NTDB id	336404	EY76 R517995 WP 003228214.1	MNLI	PVTVEQTNRGERAYDIYSRLKDRIIMLGSAIDNIVANSI	VSQLLFLAAEDPEKEISLYINSPPGGSITAG	74
NTDB id	86	BSU 34540 NP 391334.1	MNLI	PVTVEQTNRGERAYDIYSRLKDRIIMLGSAIDNIVANSI	VSQLLFLAAEDPEKEISLYINSPPGGSITAG	74
NTDB id	1223	Cj0192c YP 002343650.1	MFIP	YPVIEKSSRGERSYDIYSRLKDRIIMLSGEIHDELAASIVAQLFLAEADP	TCKDIYLYINSPGGVITSG	73
consensus			**!*	*!!!!**!*!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!*****!!*!!!***!!*!!!!**!		

NTDB id	602	KW2	RS03060	WP	011834647.1	LAIVDTMNFIKS	DVQTI	VMGMAASMG	TIASSGT	TGKGRFMLPNAEYL	LHQPMGGAGC	QGTTQQTDMAI	VAEQLL	KTRKRLEQ	155
NTDB id	611	V4T04	RS07970	WP	003129593.1	LAIVDTMNFIKS	DVQTI	VMGMAASMG	TIASSGT	TGKGRFMLPNAEYL	LHQPMGGTG	QGTTQQTDMAI	VAEQLL	KTRKRLEQ	155
NTDB id	330	STU	RS11365	WP	002949732.1	LAIVDTMNFIKS	DVQTI	VMGMAASMG	TIASSGT	TGKGRFMLPNAEYMIHQP	MGGTGGGT	QGTTQQTDMAIAA	AHHLLKTRNNLEQ	152	
NTDB id	298	STER	RS01925	WP	002949732.1	LAIVDTMNFIKS	DVQTI	VMGMAASMG	TIASSGT	TGKGRFMLPNAEYMIHQP	MGGTGGGT	QGTTQQTDMAIAA	AHHLLKTRNNLEQ	152	
NTDB id	282	KZH43	RS03215	WP	000613477.1	LAIVDTMNFIKS	DVQTI	VMGMAASMG	TIASSGT	AKGGRFMLPNAEYMIHQP	MGGTGGGT	QGTTQQTDMAIAA	AHHLLKTRNTLEK	152	
NTDB id	246	SPD	RS03495	WP	000613477.1	LAIVDTMNFIKS	DVQTI	VMGMAASMG	TIASSGT	AKGGRFMLPNAEYMIHQP	MGGTGGGT	QGTTQQTDMAIAA	AHHLLKTRNTLEK	152	
NTDB id	244	SPR	RS03300	WP	000613477.1	LAIVDTMNFIKS	DVQTI	VMGMAASMG	TIASSGT	AKGGRFMLPNAEYMIHQP	MGGTGGGT	QGTTQQTDMAIAA	AHHLLKTRNTLEK	152	
NTDB id	242	SP	RS03655	WP	000613477.1	LAIVDTMNFIKS	DVQTI	VMGMAASMG	TIASSGT	AKGGRFMLPNAEYMIHQP	MGGTGGGT	QGTTQQTDMAIAA	AHHLLKTRNTLEK	152	
NTDB id	446	SpyM6JRS4	RS01695	WP	002985850.1	LAIVDTMNFIKS	DVQTI	VMGMAASMG	TIASSGT	TGKGRFMLPNAEYMIHQP	MGGTGGGT	QGTTQQTDMAIAA	AHHLLKTRHRLEK	152	
NTDB id	445	SPYM3	RS01720	WP	002985850.1	LAIVDTMNFIKS	DVQTI	VMGMAASMG	TIASSGT	TGKGRFMLPNAEYMIHQP	MGGTGGGT	QGTTQQTDMAIAA	AHHLLKTRHRLEK	152	
NTDB id	376	SMU	RS07595	WP	255262720.1	LAIVDTMNFIKS	DVQTI	VMGMAASMG	TIASSGT	AKGGRFMLPNAEYL	LHQPMGGTG	GTSQSDMAIAA	EQLLKTRKKLEK	160	
NTDB id	336404	EQY76	RS17995	WP	003228214.1	MAIYDTMQFIKP	PKVSTICIGMAASMG	AFLLAAGEKGKRYALPNSEV	MIHQPLGGAAGG..QATIEIEIAAKRI	LLLLRDKLNK	152				
NTDB id	86	BSU	34540	NP	391334.1	MAIYDTMQFIKP	PKVSTICIGMAASMG	AFLLAAGEKGKRYALPNSEV	MIHQPLGGAAGG..QATIEIEIAAKRI	LLLLRDKLNK	152				
NTDB id	1223	Cj0192c	YP	002343650.1	FSAIYDTMNYIKP	DVCTICIGQAASMG	AFLLSCAEGEKRFALPNSRIMIHQPLGGARG.	QATDIEIQAKEILRLKITLND	151						
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	ILADNSGQPTEKVVHDAERDNWMSAQETLEYGFIDEIMTNQLK.	196
NTDB id 298 STER RS01925 WP 002949732.1	ILADNSGQPTEKVVHDAERDNWMSAQETLEYGFIDEIMTNQLK.	196
NTDB id 282 KZH43 RS03215 WP 000613477.1	ILAENSQGSMSEKVVHADAEARNWMSAQETLEYGFIDEIMANNSLN.	196
NTDB id 246 SPD RS03495 WP 000613477.1	ILAENSQGSMSEKVVHADAEARNWMSAQETLEYGFIDEIMANNSLN.	196
NTDB id 244 SPR RS03300 WP 000613477.1	ILAENSQGSMSEKVVHADAEARNWMSAQETLEYGFIDEIMANNSLN.	196
NTDB id 242 SP RS03655 WP 000613477.1	ILAENSQGSMSEKVVHADAEARNWMSAQETLEYGFIDEIMANNSLN.	196
NTDB id 446 SpyM6JRS4 RS01695 WP 002985850.1	ILAAQNAGKTIKQIHKAEDRYWMSAEEETLAYGFIDEIMENNELK.	196
NTDB id 445 SPYM3 RS01720 WP 002985850.1	ILAAQNAGKTIKQIHKAEDRYWMSAEEETLAYGFIDEIMENNELK.	196
NTDB id 376 SMU RS07595 WP 255262720.1	ILSDNSGKTIKQIHKAEDRYWMDAKETLKYGFIDEIMENNELK.	204
NTDB id 336404 EQY76 RS17995 WP 003228214.1	VLAERTTGQPLEVIERDTDRDNFKSAEEALEYGLIDKILTHTEDKK	197
NTDB id 86 BSU 34540 NP 391334.1	VLAERTTGQPLEVIERDTDRDNFKSAEEALEYGLIDKILTHTEDKK	197
NTDB id 1223 Cj0192c YP 002343650.1	ILAKNITKQKVAKIAKTDTERDFFMSAQEAKKEYGLIDKVLKSFK..	194
consensus	*!*****!****!*!!**!!!***!!*!!!!!!*!!*!!*!!*	

 non conserved
 similar
 $\geq 50\%$ conserved