

NTDB id	602	KW2 RS03060 WP 011834647.1	MGYL	VPTVIEQSSRGERAYDIYSRLKDRIIMLTGPVEDGMANS	I	IAQLFLDAQDNTKDIYLYVNTPGGSVSAG	75	
NTDB id	611	V4T04 RS07970 WP 003129593.1	MGYL	VPTVIEQSSRGERAYDIYSRLKDRIIMLTGPVEDGMANS	I	IAQLFLDAQDNTKDIYLYVNTPGGSVSAG	75	
NTDB id	282	KZH43 RS03215 WP 000613477.1		MIPVVIEQTSGERSYDIYSRLKDRIIMLTGPVEDNMANS	V	IAQLFLDAQDS	TKDIYLYVNTPGGSVSAG	72
NTDB id	246	SPD RS03495 WP 000613477.1		MIPVVIEQTSGERSYDIYSRLKDRIIMLTGPVEDNMANS	V	IAQLFLDAQDS	TKDIYLYVNTPGGSVSAG	72
NTDB id	244	SPR RS03300 WP 000613477.1		MIPVVIEQTSGERSYDIYSRLKDRIIMLTGPVEDNMANS	V	IAQLFLDAQDS	TKDIYLYVNTPGGSVSAG	72
NTDB id	242	SP RS03655 WP 000613477.1		MIPVVIEQTSGERSYDIYSRLKDRIIMLTGPVEDNMANS	V	IAQLFLDAQDS	TKDIYLYVNTPGGSVSAG	72
NTDB id	330	STU RS11365 WP 002949732.1		MIPVVIEQTSGERSYDIYSRLKDRIIMLTGPIEDNMANS	I	IAQLFLDAQDNTKDIYLYVNTPGGSVSAG	72	
NTDB id	298	STER RS01925 WP 002949732.1		MIPVVIEQTSGERSYDIYSRLKDRIIMLTGPIEDNMANS	I	IAQLFLDAQDNTKDIYLYVNTPGGSVSAG	72	
NTDB id	33540	SEQ RS08935 WP 012677455.1		MIPVVIEQTSGERSYDIYSRLKDRIIMLTGPVEDNMANS	V	IAQLFLDAQDNTKDIYLYVNTPGGSVSAG	72	
NTDB id	446	SpyM6JRS4 RS01695 WP 002985850.1		MIPVVIEQTSGERSYDIYSRLKDRIIMLTGPVEDNMANS	V	IAQLFLDAQDNTKDIYLYVNTPGGSVSAG	72	
NTDB id	445	SPYM3 RS01720 WP 002985850.1		MIPVVIEQTSGERSYDIYSRLKDRIIMLTGPVEDNMANS	V	IAQLFLDAQDNTKDIYLYVNTPGGSVSAG	72	
NTDB id	376	SMU RS07595 WP 255262720.1	MELKEKYS	MIPVVIEQTSGERSYDIYSRLKDRIIMLTGPVEDNMANS	I	IAQLFLDAQDNTKDIYLYINSPGGSVSAG	80	
NTDB id	1223	Cj0192c YP 002343650.1	MF	IPYVIEKSSRGRSYDIYSRLKDRIIMLSGEIHDELAAS	I	VAQLFLAEADPTKDIYLYINSPGGVITS	73	
NTDB id	86	BSU 34540 NP 391334.1	MNL	IPTVIEQTNRGERAYDIYSRLKDRIIMLGSAIDDNVANS	I	VSQLLFLAAEDPEKEISLYINSPGGSITAG	74	
consensus				***!*****!!*!!!!!!!!!!!!!!!!!!!!!!**!*!*!*!*!*!*!*!*!*!*!*!*!*!*!*!				

NTDB	id	602	KW2	RS03060	WP	011834647.1	LAIVDTMNF	IKS	DVQ	TIV	MGMA	ASMG	T	I	ASSG	T	KGK	R	F	M	L	P	N	A	E	Y	L	I	H	Q	P	M	G	G	A	G	Q	T	Q	T	D	M	A	I	V	A	E	Q	L	L	K	R	K	R	L	E	Q	155
NTDB	id	611	V4T04	RS07970	WP	003129593.1	LAIVDTMNF	IKS	DVQ	TIV	MGMA	ASMG	T	I	ASSG	T	KGK	R	F	M	L	P	N	A	E	Y	L	I	H	Q	P	M	G	G	T	Q	T	Q	T	D	M	A	I	V	A	E	Q	L	L	K	R	K	R	L	E	Q	155	
NTDB	id	282	KZH43	RS03215	WP	000613477.1	LAIVDTMNF	IKA	DVQ	TIV	MGMA	ASMG	T	V	I	ASSG	A	K	G	K	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	R	N	T	L	E	K	152
NTDB	id	246	SPZ	RS03495	WP	000613477.1	LAIVDTMNF	IKA	DVQ	TIV	MGMA	ASMG	T	V	I	ASSG	A	K	G	K	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	R	N	T	L	E	K	152
NTDB	id	244	SPR	RS03300	WP	000613477.1	LAIVDTMNF	IKA	DVQ	TIV	MGMA	ASMG	T	V	I	ASSG	A	K	G	K	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	R	N	T	L	E	K	152
NTDB	id	242	SP	RS03655	WP	000613477.1	LAIVDTMNF	IKA	DVQ	TIV	MGMA	ASMG	T	V	I	ASSG	A	K	G	K	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	R	N	T	L	E	K	152
NTDB	id	330	STU	RS11365	WP	002949732.1	LAIVDTMNF	IKS	DVQ	TIV	MGMA	ASMG	T	I	ASSG	T	KGK	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	R	N	N	L	E	Q	152			
NTDB	id	298	STER	RS01925	WP	002949732.1	LAIVDTMNF	IKS	DVQ	TIV	MGMA	ASMG	T	I	ASSG	T	KGK	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	R	N	N	L	E	Q	152			
NTDB	id	33540	SEQ	RS08935	WP	012677455.1	LAIVDTMNF	IKA	DVQ	TIV	MGMA	ASMG	T	V	I	ASSG	A	K	G	K	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	R	H	R	L	E	K	152
NTDB	id	446	SpyM6	JRS4	RS01695	WP	002985850.1	LAIVDTMNF	IKA	DVQ	TIV	MGMA	ASMG	T	V	I	ASSG	T	KGK	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	R	H	R	L	E	K	152	
NTDB	id	445	SPYM3	RS01720	WP	002985850.1	LAIVDTMNF	IKA	DVQ	TIV	MGMA	ASMG	T	V	I	ASSG	T	KGK	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	R	H	R	L	E	K	152		
NTDB	id	376	SMU	RS07595	WP	255262720.1	LAIVDTMNF	IKS	DVQ	TIV	MG	IA	ASMG	T	I	ASSG	A	K	G	K	R	F	M	L	P	N	A	E	Y	L	I	H	Q	P	M	G	G	T	Q	T	D	M	A	I	A													

NTDB id 602 KW2 RS03060 WP 011834647.1	ILADNSNRSLQIHKDAERDHWMDAKETLEYGFIDEIMENNSLK.	199
NTDB id 611 V4T04 RS07970 WP 003129593.1	ILADNSNRSLQIHKDAERDHWMDAKETLEYGFIDEIMENNSLK.	199
NTDB id 282 KZH43 RS03215 WP 000613477.1	ILAENSGQSMEKVVHADAERDNWMSAQETLEYGFIDEIMANNSLN.	196
NTDB id 246 SPD RS03495 WP 000613477.1	ILAENSGQSMEKVVHADAERDNWMSAQETLEYGFIDEIMANNSLN.	196
NTDB id 244 SPR RS03300 WP 000613477.1	ILAENSGQSMEKVVHADAERDNWMSAQETLEYGFIDEIMANNSLN.	196
NTDB id 242 SP RS03655 WP 000613477.1	ILAENSGQSMEKVVHADAERDNWMSAQETLEYGFIDEIMANNSLN.	196
NTDB id 330 STU RS11365 WP 002949732.1	ILADNSGQPTEKVHVDAERDNWMSAQETLEYGFIDEIMTNQLK.	196
NTDB id 298 STER RS01925 WP 002949732.1	ILADNSGQPTEKVHVDAERDNWMSAQETLEYGFIDEIMTNQLK.	196
NTDB id 33540 SEQ RS08935 WP 012677455.1	ILAAQNAGKTIKQIHKAERDYWMSAEETLAYGFIDEIMENNELA.	196
NTDB id 446 SpyM6JRS4 RS01695 WP 002985850.1	ILAAQNAGKTIKQIHKAERDYWMSAEETLAYGFIDEIMENNELK.	196
NTDB id 445 SPYM3 RS01720 WP 002985850.1	ILAAQNAGKTIKQIHKAERDYWMSAEETLAYGFIDEIMENNELK.	196
NTDB id 376 SMU RS07595 WP 255262720.1	ILSDNSGKTIKQIHKAERDYWMDAKETLKYGFIDEIMENNELK.	204
NTDB id 1223 Cj0192c YP 002343650.1	ILAKNTKQKVKAIKADTERDFFMSAQEAKHEYGLIDKVLKSFK.	194
NTDB id 86 BSU 34540 NP 391334.1	VLAERTGGPLEVIERDTDRDNFKSAAEEALEYGLIDKILTHTEDKK	197
consensus	*!***** * * ! * * * ! * * * ! * * * ! * * * ! * * *	

 non conserved
 similar
 $\geq 50\%$ conserved