

NTDB id	602	KW2 RS03060 WP 011834647.1	MGYL	VPTVIEQSSRGERAYDIYSRLKDRIIMLTGPVEDGMANSIIAQLFLDAQDNTKDIYLYVNTPGGSVSAG	75
NTDB id	611	V4T04 RS07970 WP 003129593.1	MGYL	VPTVIEQSSRGERAYDIYSRLKDRIIMLTGPVEDGMANSIIAQLFLDAQDNTKDIYLYVNTPGGSVSAG	75
NTDB id	330	STU RS11365 WP 002949732.1	MIPV	VIEQTSGRSYDIYSRLKDRIIMLTGPIEDNMANSIIAQLFLDAQDNTKDIYLYVNTPGGSVSAG	72
NTDB id	298	STER RS01925 WP 002949732.1	MIPV	VIEQTSGRSYDIYSRLKDRIIMLTGPIEDNMANSIIAQLFLDAQDNTKDIYLYVNTPGGSVSAG	72
NTDB id	282	KZH43 RS03215 WP 000613477.1	MIPV	VIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSIIAQLFLDAQDS TKDIYLYVNTPGGSVSAG	72
NTDB id	246	SPD RS03495 WP 000613477.1	MIPV	VIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSIIAQLFLDAQDS TKDIYLYVNTPGGSVSAG	72
NTDB id	244	SPR RS03300 WP 000613477.1	MIPV	VIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSIIAQLFLDAQDS TKDIYLYVNTPGGSVSAG	72
NTDB id	242	SP RS03655 WP 000613477.1	MIPV	VIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSIIAQLFLDAQDS TKDIYLYVNTPGGSVSAG	72
NTDB id	446	SpyM6JRS4 RS01695 WP 002985850.1	MIPV	VIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSIIAQLFLDAQDNTKDIYLYVNTPGGSVSAG	72
NTDB id	445	SPYM3 RS01720 WP 002985850.1	MIPV	VIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSIIAQLFLDAQDNTKDIYLYVNTPGGSVSAG	72
NTDB id	376	SMU RS07595 WP 255262720.1	MELKEKYS	MIPVVIEQTSGRSYDIYSRLKDRIIMLTGPVEDNMANSIIAQLFLDAQDNTKDIYLYINSPGGSVSAG	80
NTDB id	995823	AAHT64 RS02830 WP 003228214.1	MNL	IPTVIEQTNRGERAYDIYSRLKDRIIMLGSAIDDNVANISVSQLLFLAAEDPEKEISLYINSPGGSI TAG	74
NTDB id	86	BSU 34540 NP 391334.1	MNL	IPTVIEQTNRGERAYDIYSRLKDRIIMLGSAIDDNVANISVSQLLFLAAEDPEKEISLYINSPGGSI TAG	74
NTDB id	1223	Cj0192c YP 002343650.1	MFIP	YVIEKSSRGRSYDIYSRLKDRIIMLSGEIHDELAASIVAQLFLAEADPTKDIYLYINSPGGVITSG	73
consensus					**!*!!!!!!**!*!!!!!!**!*!!!!!!**!*!!!!!!**!*!!!!!!**!*!!!!!!**!*!!!!!!**!*!!!!!!

NTDB id 602 KW2 RS03060 WP 011834647.1	LAIVDTMNF	IKS	DVQ	TIVM	GMAAS	MG	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	G	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	TIVM	GMAAS	MG	T	I	ASSG	T	KGK	R	F	M	L	P	N	A	E	Y	L	I	H	Q	P	M	G	G	T	G	Q	G	T	Q	T	D	M	A	I	V	A	E	Q	L	L	K	R	K	R	L	E	Q	155		
NTDB id 330 STU RS11365 WP 002949732.1	LAIVDTMNF	IKS	DVQ	TIVM	GMAAS	MG	T	I	ASSG	T	KGK	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	T	R	N	N	L	E	Q	152		
NTDB id 298 STER RS01925 WP 002949732.1	LAIVDTMNF	IKS	DVQ	TIVM	GMAAS	MG	T	I	ASSG	T	KGK	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	T	R	N	N	L	E	Q	152		
NTDB id 282 KZH43 RS03215 WP 000613477.1	LAIVDTMNF	IKS	DVQ	TIVM	GMAAS	MG	T	I	ASSG	A	K	G	K	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	T	R	N	T	L	E	K	152
NTDB id 246 SPD RS03495 WP 000613477.1	LAIVDTMNF	IKS	DVQ	TIVM	GMAAS	MG	T	I	ASSG	A	K	G	K	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	T	R	N	T	L	E	K	152
NTDB id 244 SPR RS03300 WP 000613477.1	LAIVDTMNF	IKS	DVQ	TIVM	GMAAS	MG	T	I	ASSG	A	K	G	K	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	T	R	N	T	L	E	K	152
NTDB id 242 SP RS03655 WP 000613477.1	LAIVDTMNF	IKS	DVQ	TIVM	GMAAS	MG	T	I	ASSG	A	K	G	K	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	T	R	N	T	L	E	K	152
NTDB id 446 SpyM6JRS4 RS01695 WP 002985850.1	LAIVDTMNF	IKS	DVQ	TIVM	GMAAS	MG	T	I	ASSG	T	KGK	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	T	R	H	R	L	E	K	152		
NTDB id 445 SPY3 RS01720 WP 002985850.1	LAIVDTMNF	IKS	DVQ	TIVM	GMAAS	MG	T	I	ASSG	T	KGK	R	F	M	L	P	N	A	E	Y	M	I	H	Q	P	M	G	G	T	G	G	T	Q	T	D	M	A	I	A	A	E	H	L	L	K	T	R	H	R	L	E	K	152		
NTDB id 376 SMU RS07595 WP 255262720.1	LAIVDTMNF	IKS	DVQ	TIVM	G	I	A	A	S	M	G	T	I	A	A	S	M	G	T	I	A	A	S	M	G	T																													

NTDB id 602 KW2 RS03060 WP 011834647.1	ILADNSNRSL	EQIHKDAERDHWMDAK	ETLEYGFIDEIMENNSLK.	199
NTDB id 611 V4T04 RS07970 WP 003129593.1	ILADNSNRSL	EQIHKDAERDHWMDAK	ETLEYGFIDEIMENNSLK.	199
NTDB id 330 STU RS11365 WP 002949732.1	ILADNSGQPI	EKVHVDAERDNWMSAQ	ETLEYGFIDEIMTNNQLK.	196
NTDB id 298 STER RS01925 WP 002949732.1	ILADNSGQPI	EKVHVDAERDNWMSAQ	ETLEYGFIDEIMTNNQLK.	196
NTDB id 282 KZH43 RS03215 WP 000613477.1	ILAE NSGQSM	EKVHADAERDNWMSAQ	ETLEYGFIDEIMANNSLN.	196
NTDB id 246 SPD RS03495 WP 000613477.1	ILAE NSGQSM	EKVHADAERDNWMSAQ	ETLEYGFIDEIMANNSLN.	196
NTDB id 244 SPR RS03300 WP 000613477.1	ILAE NSGQSM	EKVHADAERDNWMSAQ	ETLEYGFIDEIMANNSLN.	196
NTDB id 242 SP RS03655 WP 000613477.1	ILAE NSGQSM	EKVHADAERDNWMSAQ	ETLEYGFIDEIMANNSLN.	196
NTDB id 446 SpyM6JRS4 RS01695 WP 002985850.1	ILAAQNAKGT	IKIHKDAERDYWMSAE	ETLAYGFIDEIMENNELK.	196
NTDB id 445 SPYM3 RS01720 WP 002985850.1	ILAAQNAKGT	IKIHKDAERDYWMSAE	ETLAYGFIDEIMENNELK.	196
NTDB id 376 SMU RS07595 WP 255262720.1	ILSDNSGKTI	IKIHKDAERDYWMDAK	ETLKYGFIDEIMENNELK.	204
NTDB id 995823 AAHT64 RS02830 WP 003228214.1	VLAERTGQPL	EVIERDTRDNFKSAEE	ALEYGLIDKILTHTEDKK	197
NTDB id 86 BSU 34540 NP 391334.1	VLAERTGQPL	EVIERDTRDNFKSAEE	ALEYGLIDKILTHTEDKK	197
NTDB id 1223 Cj0192c YP 002343650.1	ILAKNTIKQK	VAKIAKTDTERDFFMSAQ	EAKLEYGLIDKVLEKSFK..	194
consensus	*****	*****	*****	

 non conserved
 similar
 $\geq 50\%$ conserved