

NTDB id 602 KW2 RS03060 WP 011834647.1	MGYL	VPTVIEQSSRGERAYDIYSRL	LKDRIIMLTGPVEDGMANS	IAQLFLDAQDNTKDIYLYVNT	PGGSVSAG	75
NTDB id 611 V4T04 RS07970 WP 003129593.1	MGYL	VPTVIEQSSRGERAYDIYSRL	LKDRIIMLTGPVEDGMANS	IAQLFLDAQDNTKDIYLYVNT	PGGSVSAG	75
NTDB id 330 STU RS11365 WP 002949732.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPIEDNMANS	IAQLFLDAQDNTKDIYLYVNT	PGGSVSAG
NTDB id 298 STER RS01925 WP 002949732.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPIEDNMANS	IAQLFLDAQDNTKDIYLYVNT	PGGSVSAG
NTDB id 282 KZH43 RS03215 WP 000613477.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPVEDNMANS	IAQLFLDAQDSTKDIYLYVNT	PGGSVSAG
NTDB id 246 SPD RS03495 WP 000613477.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPVEDNMANS	IAQLFLDAQDSTKDIYLYVNT	PGGSVSAG
NTDB id 244 SPR RS03300 WP 000613477.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPVEDNMANS	IAQLFLDAQDSTKDIYLYVNT	PGGSVSAG
NTDB id 242 SP RS03655 WP 000613477.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPVEDNMANS	IAQLFLDAQDSTKDIYLYVNT	PGGSVSAG
NTDB id 978315 MGAS37817 RS01925 WP 002985850.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPVEDNMANS	IAQLFLDAQDNTKDIYLYVNT	PGGSVSAG
NTDB id 446 SpyM6JRS4 RS01695 WP 002985850.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPVEDNMANS	IAQLFLDAQDNTKDIYLYVNT	PGGSVSAG
NTDB id 445 SPYM3 RS01720 WP 002985850.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPVEDNMANS	IAQLFLDAQDNTKDIYLYVNT	PGGSVSAG
NTDB id 376 SMU RS07595 WP 255262720.1	MELKEKYS	MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPVEDNMANS	IAQLFLDAQDNTKDIYLYINS	PGGSVSAG
NTDB id 1223 Cj0192c YP 002343650.1	MF	IPYVIEKSSRGERAYDIYSRL	LKDRIIMLTSGEIHDELAAS	IVAQLFLFAEDPTKDIYLYINS	PGGVITSG	73
NTDB id 86 BSU 34540 NP 391334.1	MNL	IPTVIEQTNRGERAYDIYSRL	LKDRIIMLTGSAIDNNVANS	IVSQLFLFAEDPEKESLYINS	PGGSITAG	74
consensus	*****	*****	*****	*****	*****	

NTDB id 602 KW2 RS03060 WP 011834647.1	LAIVDTMNFIKS	DVQTI	VMGMAAS	MGTI	TI	ASSG	TGKGRF	MPLPNAEY	L	I	HQPMGG	AG	Q	G	T	Q	T	D	M	A	V	A	E	Q	L	L	K	T	R	K	R	L	E	Q	155																
NTDB id 611 V4T04 RS07970 WP 003129593.1	LAIVDTMNFIKS	DVQTI	VMGMAAS	MGTI	TI	ASSG	TGKGRF	MPLPNAEY	L	I	HQPMGG	T	Q	G	T	Q	T	D	M	A	V	A	E	Q	L	L	K	T	R	K	R	L	E	Q	155																
NTDB id 330 STU RS11365 WP 002949732.1	LAIVDTMNFIKS	DVQTI	VMGMAAS	MGTI	TI	ASSG	TGKGRF	MPLPNAEY	M	I	HQPMGG	T	G	G	T	Q	T	D	M	A	I	A	E	H	L	L	K	T	R	N	N	L	E	Q	152																
NTDB id 298 STER RS01925 WP 002949732.1	LAIVDTMNFIKS	DVQTI	VMGMAAS	MGTI	TI	ASSG	TGKGRF	MPLPNAEY	M	I	HQPMGG	T	G	G	T	Q	T	D	M	A	I	A	E	H	L	L	K	T	R	N	N	L	E	Q	152																
NTDB id 282 KZH43 RS03215 WP 000613477.1	LAIVDTMNFIKS	DVQTI	VMGMAAS	MGTI	VI	ASSG	A	K	G	K	R	F	M	L	P	N	A	E	M	I	H	Q	P	M	G	G	T	G	G	T	Q	T	D	M	A	I	A	E	H	L	L	K	T	R	N	T	L	E	K	152	
NTDB id 246 SPD RS03495 WP 000613477.1	LAIVDTMNFIKS	DVQTI	VMGMAAS	MGTI	VI	ASSG	A	K	G	K	R	F	M	L	P	N	A	E	M	I	H	Q	P	M	G	G	T	G	G	T	Q	T	D	M	A	I	A	E	H	L	L	K	T	R	N	T	L	E	K	152	
NTDB id 244 SPR RS03300 WP 000613477.1	LAIVDTMNFIKS	DVQTI	VMGMAAS	MGTI	VI	ASSG	A	K	G	K	R	F	M	L	P	N	A	E	M	I	H	Q	P	M	G	G	T	G	G	T	Q	T	D	M	A	I	A	E	H	L	L	K	T	R	N	T	L	E	K	152	
NTDB id 242 SP RS03655 WP 000613477.1	LAIVDTMNFIKS	DVQTI	VMGMAAS	MGTI	VI	ASSG	A	K	G	K	R	F	M	L	P	N	A	E	M	I	H	Q	P	M	G	G	T	G	G	T	Q	T	D	M	A	I	A	E	H	L	L	K	T	R	N	T	L	E	K	152	
NTDB id 978315 MGAS37817 RS01925 WP 002985850.1	LAIVDTMNFIKS	DVQTI	VMGMAAS	MGTI	VI	ASSG	T	G	K	G	R	F	M	L	P	N	A	E	M	I	H	Q	P	M	G	G	T	G	G	T	Q	T	D	M	A	I	A	E	H	L	L	K	T	R	H	R	L	E	K	152	
NTDB id 446 SpyM6JRS4 RS01695 WP 002985850.1	LAIVDTMNFIKS	DVQTI	VMGMAAS	MGTI	VI	ASSG	T	G	K	G	R	F	M	L	P	N	A	E	M	I	H	Q	P	M	G	G	T	G	G	T	Q	T	D	M	A	I	A	E	H	L	L	K	T	R	H	R	L	E	K	152	
NTDB id 445 SPYM3 RS01720 WP 002985850.1	LAIVDTMNFIKS	DVQTI	VMGMAAS	MGTI	VI	ASSG	T	G	K	G	R	F	M	L	P	N	A	E	M	I	H	Q	P	M	G	G	T	G	G	T	Q	T	D	M	A	I	A	E	H	L	L	K	T	R	H	R	L	E	K	152	
NTDB id 376 SMU RS07595 WP 255262720.1	LAIVDTMNFIKS	DVQTI	VMG	IAAS	MGTI	TI	ASSG	A	K	G	K	R	F	M	L	P	N	A	E	L	I	H	Q	P	M	G	G	T	G	G	T	Q	Q	S	D	M	A	I	A	E	Q	L	L	K	T	R	K	K	L	E	K

NTDB id 602 KW2 RS03060 WP 011834647.1	ILADNSNRSL	EQIHKDAERD	HWMDAKETLEYGFIDEIMENNSLK.	199
NTDB id 611 V4T04 RS07970 WP 003129593.1	ILADNSNRSL	EQIHKDAERD	HWMDAKETLEYGFIDEIMENNSLK.	199
NTDB id 330 STU RS11365 WP 002949732.1	ILADNSGQPI	IEKVHVDAERD	NWMSAQETLEYGFIDEIMTNNQLK.	196
NTDB id 298 STER RS01925 WP 002949732.1	ILADNSGQPI	IEKVHVDAERD	NWMSAQETLEYGFIDEIMTNNQLK.	196
NTDB id 282 KZH43 RS03215 WP 000613477.1	ILAENSGQSMEK	VHADAERD	NWMSAQETLEYGFIDEIMANNSLN.	196
NTDB id 246 SPD RS03495 WP 000613477.1	ILAENSGQSMEK	VHADAERD	NWMSAQETLEYGFIDEIMANNSLN.	196
NTDB id 244 SPR RS03300 WP 000613477.1	ILAENSGQSMEK	VHADAERD	NWMSAQETLEYGFIDEIMANNSLN.	196
NTDB id 242 SP RS03655 WP 000613477.1	ILAENSGQSMEK	VHADAERD	NWMSAQETLEYGFIDEIMANNSLN.	196
NTDB id 978315 MGAS37817 RS01925 WP 002985850.1	ILAQNAGKTIKQ	IHKDAERDY	WMSAEETLAYGFIDEIMENNELK.	196
NTDB id 446 SpyM6JRS4 RS01695 WP 002985850.1	ILAQNAGKTIKQ	IHKDAERDY	WMSAEETLAYGFIDEIMENNELK.	196
NTDB id 445 SPYM3 RS01720 WP 002985850.1	ILAQNAGKTIKQ	IHKDAERDY	WMSAEETLAYGFIDEIMENNELK.	196
NTDB id 376 SMU RS07595 WP 255262720.1	ILSDNSGKTIKQ	IHKDAERDY	WMDAKETLKYGFIDEIMENNELK.	204
NTDB id 1223 Cj0192c YP 002343650.1	ILAKNTKQKQVAK	IAKDTTERDF	FMSAQEAKLEYGLIDKVLKESFK..	194
NTDB id 86 BSU 34540 NP 391334.1	VLAERTGQPLEV	IERDTRDRN	FKSAEEALEYGLIDKILTHTEDKK	197
consensus	*!*****	***!!*!!	***!!*!!*!!*!!*!!*!!*!!*!!*!!	

 non conserved
 similar
 $\geq 50\%$ conserved