

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	72
NTDB id 298 STER RS01925 WP 002949732.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPIEDNMANS	IAQLFLDAQDNTKDIYLYVNT	PGGSVSAG	72
NTDB id 282 KZH43 RS03215 WP 000613477.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPVEDNMANS	IAQLFLDAQDSTKDIYLYVNT	PGGSVSAG	72
NTDB id 246 SPD RS03495 WP 000613477.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPVEDNMANS	IAQLFLDAQDSTKDIYLYVNT	PGGSVSAG	72
NTDB id 244 SPR RS03300 WP 000613477.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPVEDNMANS	IAQLFLDAQDSTKDIYLYVNT	PGGSVSAG	72
NTDB id 242 SP RS03655 WP 000613477.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPVEDNMANS	IAQLFLDAQDSTKDIYLYVNT	PGGSVSAG	72
NTDB id 978092 MGAS37828 RS01925 WP 002985850.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPVEDNMANS	IAQLFLDAQDNTKDIYLYVNT	PGGSVSAG	72
NTDB id 446 SpyM6JRS4 RS01695 WP 002985850.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPVEDNMANS	IAQLFLDAQDNTKDIYLYVNT	PGGSVSAG	72
NTDB id 445 SPYM3 RS01720 WP 002985850.1		MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPVEDNMANS	IAQLFLDAQDNTKDIYLYVNT	PGGSVSAG	72
NTDB id 376 SMU RS07595 WP 255262720.1	MELKEKYS	MIPVVEIQT	SRGERSYDIYSRL	LKDRIIMLTGPVEDNMANS	IAQLFLDAQDNTKDIYLYINS	PGGSVSAG	80
NTDB id 1223 Cj0192c YP 002343650.1	MF	IPYVIEKSSRGERAYDIYSRL	LKDRIIMLTSGEIHDELAAS	IVAQLFLFAEDPTKDIYLYINS	PGGVITSG	73	
NTDB id 86 BSU 34540 NP 391334.1	MNL	IPTVIEQTNRGERAYDIYSRL	LKDRIIMLTGSAIDNVANS	IVSQLFLFAEDPEKESLYINS	PGGSITAG	74	
consensus	*****	*****	*****	*****	*****		

NTDB id	602 KW2 RS03060 WP 011834647.1	LAIVDTMNFIKS	DVQTI VMGMAASMG T	IASSGT	TGKGRFMLPNAEYLIHQPMGGAGQG GTQTDMATVAEQLLKTRKRLE Q	155
NTDB id	611 V4T04 RS07970 WP 003129593.1	LAIVDTMNFIKS	DVQTI VMGMAASMG T	IASSGT	TGKGRFMLPNAEYL I HQPMGGTGQQGT QT DMAT VA EQ LL K TR KR LE Q	155
NTDB id	330 STU RS11365 WP 002949732.1	LAIVDTMNFIKS	DVQTI VMGMAASMG T	IASSGT	TGKGRFMLPNAEYMIHQ PMGGT G GG T QQ TD MAI AA EH L L K TR NN L E Q	152
NTDB id	298 STER RS01925 WP 002949732.1	LAIVDTMNFIKS	DVQTI VMGMAASMG T	IASSGT	TGKGRFMLPNAEYMIHQ PMGGT G GG T QQ TD MAI AA EH L L K TR NN L E Q	152
NTDB id	282 KZH43 RS03215 WP 000613477.1	LAIVDTMNFIKA	DVQTI VMGMAASMG T	V I ASSGA	K GK RF ML P NA E Y MI H Q PM GG T G GG T QQ TD M A I AA EH L L K TR NT L EK	152
NTDB id	246 SPD RS03495 WP 000613477.1	LAIVDTMNFIKA	DVQTI VMGMAASMG T	V I ASSGA	K GK RF ML P NA E Y MI H Q PM GG T G GG T QQ TD M A I AA EH L L K TR NT L EK	152
NTDB id	244 SPR RS03300 WP 000613477.1	LAIVDTMNFIKA	DVQTI VMGMAASMG T	V I ASSGA	K GK RF ML P NA E Y MI H Q PM GG T G GG T QQ TD M A I AA EH L L K TR NT L EK	152
NTDB id	242 SP RS03655 WP 000613477.1	LAIVDTMNFIKA	DVQTI VMGMAASMG T	V I ASSGA	K GK RF ML P NA E Y MI H Q PM GG T G GG T QQ TD M A I AA EH L L K TR NT L EK	152
NTDB id	978092 MGAS37828 RS01925 WP 002985850.1	LAIVDTMNFIKA	DVQTI VMGMAASMG T	V I ASSGT	TGKGRFMLPNAEYMIHQ PMGGT G GG T QQ TD M A I AA EH L L K TR HR L EK	152
NTDB id	446 SpyM6JRS4 RS01695 WP 002985850.1	LAIVDTMNFIKA	DVQTI VMGMAASMG T	V I ASSGT	TGKGRFMLPNAEYMIHQ PMGGT G GG T QQ TD M A I AA EH L L K TR HR L EK	152
NTDB id	445 SPYM3 RS01720 WP 002985850.1	LAIVDTMNFIKA	DVQTI VMGMAASMG T	V I ASSGT	TGKGRFMLPNAEYMIHQ PMGGT G GG T QQ TD M A I AA EH L L K TR HR L EK	152
NTDB id	376 SMU RS07595 WP 255262720.1	LAIVDTMNFIKS	DVQTI VMGI A ASMG T	I ASSGA	K GK RF ML P NA E Y LI HQ PM GG T G GG T QQ S D MA I AA EQ LL K TR KK L EK	160
NTDB id	1223 Cj0192c YP 002343650.1	F SI YD TM N Y IK P	DVCTICIGQAASMGAF	L L SC GA EGKRFALPN SRIMIHQLPGARG..QATDIETIAKETLR L KTILND	151	
NTDB id	86 BSU 34540 NP 391334.1	M AI Y DT MQ F IK P	S TIC IG MA ASM GF L LA AGC	E KG R Y AL PN SE V MIH QL PG QA QG . . Q AT ET IE IA AK RL IL LD RK LN K	152	
consensus		** * ! *	* ! ** ! *	*	* ! ** ! *	* ! ** ! *

NTDB id 602 KW2 RS03060 WP 011834647.1	ILADNSNRSL	EQIHKDAERD	HWM	DAKETLEYGFIDEIM	ENNSLK.	199
NTDB id 611 V4T04 RS07970 WP 003129593.1	ILADNSNRSL	EQIHKDAERD	HWM	DAKETLEYGFIDEIM	ENNSLK.	199
NTDB id 330 STU RS11365 WP 002949732.1	ILADNSGQPI	IEKVHVDAERD	NWMSA	QETLEYGFIDEIM	TNNQLK.	196
NTDB id 298 STER RS01925 WP 002949732.1	ILADNSGQPI	IEKVHVDAERD	NWMSA	QETLEYGFIDEIM	TNNQLK.	196
NTDB id 282 KZH43 RS03215 WP 000613477.1	ILAENSGQSMEK	VHADAERD	NWMSA	QETLEYGFIDEIM	ANNNSLN.	196
NTDB id 246 SPD RS03495 WP 000613477.1	ILAENSGQSMEK	VHADAERD	NWMSA	QETLEYGFIDEIM	ANNNSLN.	196
NTDB id 244 SPR RS03300 WP 000613477.1	ILAENSGQSMEK	VHADAERD	NWMSA	QETLEYGFIDEIM	ANNNSLN.	196
NTDB id 242 SP RS03655 WP 000613477.1	ILAENSGQSMEK	VHADAERD	NWMSA	QETLEYGFIDEIM	ANNNSLN.	196
NTDB id 978092 MGAS37828 RS01925 WP 002985850.1	ILAQNAGKTIKQ	IHKDAERDY	WMSAE	ETLAYGFIDEIM	NNNELK.	196
NTDB id 446 SpyM6JRS4 RS01695 WP 002985850.1	ILAQNAGKTIKQ	IHKDAERDY	WMSAE	ETLAYGFIDEIM	NNNELK.	196
NTDB id 445 SPYM3 RS01720 WP 002985850.1	ILAQNAGKTIKQ	IHKDAERDY	WMSAE	ETLAYGFIDEIM	NNNELK.	196
NTDB id 376 SMU RS07595 WP 255262720.1	ILSDNSGKTIKQ	IHKDAERDY	WMDAK	ETLKYGFIDEIM	NNNELK.	204
NTDB id 1223 Cj0192c YP 002343650.1	ILAKNTKQKQVAK	IAKDTERDF	FMSAQ	EAK	EYGLIDK	VLEKSFK..
NTDB id 86 BSU 34540 NP 391334.1	VLAERTGQPLEV	IERDTRDRN	NFKSAE	EAL	EYGLIDK	ILTHTEDKK
consensus	*I*****	EQIHKDAERD	HWM	DAKETLEYGFIDEIM	ENNSLK.	199

 non conserved
 similar
 $\geq 50\%$ conserved