

NTDB id 1029	TT RS02230 WP 011228203.1	MPVYQYKARDRQGRLVEATIEAEDLRTAARL	LRDRGLFVAEIKPEPKGLQ	AEVRIPALERGPGLK	65			
NTDB id 1402	DSB67 RS12670 WP 010643257.1	.MKT.....IAPQLKNYRWKGINSSGKK.TSGNV	LAMTEIEVRERLDAQHIIKKLKKGSISFITK....	ISHRVKGGK	67			
NTDB id 1169	A1552VC RS11075 WP 000648511.1	MKAT.....QTLPLKNYRWKGINSGKK.VSGQML	LAISEIEVRDKLKDQHIQIKKLKKGSVSLLAR....	LTHRVKSK	68			
NTDB id 1112	NGFG RS09215 WP 003689811.1	.MAKNGGFSFLFAKKEKRFIFEGRHASD	KLNVGEVSAFTEEEARKKLAKRGIRPLQITRV....	KT....SSKRKITQE	70			
NTDB id 1113	AAA85695.1 219..1451()	.MAKNGGFSFLFAKKEKRFIFEGRHASD	KLNVGEVSAFTEEEARKKLAKRGIRPLQITRV....	KT....SSKRKITQE	70			
NTDB id 1252	GC085 RS07730 WP 011213805.1	.MDKN.....SPPLLTFHYQGINKAGQK.MEGDI	QARSLATAKADLRKQGI	VTNKVVKKRKPLFDR....	KNKKITQA			
NTDB id 1198	PSJM300 03950 AFN76868.1	.MAQK.....AIKNSVFTWEGLDRQGAK.IKGELS	GVSPALVKAQLRKQGINPQKVRKKSISLFS....	AGKKIKPM	66			
NTDB id 1016	ACIAD RS01680 WP 004920476.1	MAAKK.....TQVMPVFAYEGVDRKGIK.LKGEL	PARNMALAKVTLRKQGITIRTI	REKRKNIFEG....	LLKKVKKPL			
NTDB id 302822	DT536 RS03135 WP 010325767.1	MAVKK.....AQMMPTFNYEGIDRKGAK.IKGEL	PARNLALAKVTLRKQGITIKSIREKKN	ILEG....	ILKKKVTTL			
NTDB id 1059	ABD1 RS01610 WP 000279215.1	MAVKK.....AQMMPTFAYEGVDRKGVK.IKGEL	PAKNMALAKVTLRKQGVTVRNIREKKN	ILEG....	LFKKKVTTL			
consensus		***	* * *	***** * *	* * *	!***** * *	***** * *	*****

NTDB	id	1029	TT	RS02230	WP	011228203.1	D	L	A	I	F	S	R	Q	L	A	T	M	L	G	A	G	L	T	L	L	Q	A	L	A	I	L	E	R	Q	T	E	N	R	K	F	R	E	I	L	K	Q	V	R	T	D	V	E	G	G	M	A	F	S	E	A	L	S	K	H	.	K	I	F	S	R	L	Y	V	N	L	V	R	A	G	E	T	S	G	G	L	144
NTDB	id	1402	DSB67	RS12670	WP	010643257.1	D	I	T	I	F	T	R	Q	L	A	T	M	L	M	T	G	V	P	I	V	Q	A	L	K	L	V	S	E	N	H	K	K	A	E	M	K	S	I	L	M	S	V	T	R	A	V	E	A	G	T	P	M	S	K	A	M	R	T	A	S	T	H	F	D	P	L	Y	T	D	L	I	A	T	G	E	Q	S	G	N	L	147
NTDB	id	1169	A1552VC	RS11075	WP	000648511.1	D	I	T	I	L	T	R	Q	L	A	T	M	L	T	G	V	P	I	V	Q	A	L	K	L	V	G	D	N	H	R	K	A	E	M	K	S	I	L	A	Q	I	T	K	S	V	E	A	G	T	P	L	S	K	A	M	R	T	A	S	A	H	F	D	T	L	Y	V	D	L	V	E	T	G	E	M	S	G	N	L	148	
NTDB	id	1112	NGFG	RS09215	WP	003689811.1	D	I	T	V	T	R	Q	L	S	T	M	I	K	A	G	L	P	M	Q	A	F	E	I	V	A	R	G	H	G	N	P	S	M	T	E	M	L	M	E	I	R	G	Q	V	E	Q	G	S	S	L	S	R	A	F	S	N	H	P	K	Y	F	D	R	F	Y	C	N	L	V	A	A	G	E	T	G	G	V	L	150		
NTDB	id	1113	AAA85695.1	219..1451	()		D	I	T	V	T	R	Q	L	S	T	M	I	N	A	G	L	P	M	Q	A	F	E	I	V	A	R	G	H	G	N	P	S	M	T	E	M	L	M	E	I	R	G	Q	V	E	Q	G	S	S	L	S	R	A	F	S	N	H	P	K	Y	F	D	R	F	Y	C	N	L	V	A	A	G	E	T	G	G	V	L	150		
NTDB	id	1252	GC085	RS07730	WP	011213805.1	D	I	T	V	F	S	R	Q	L	A	T	M	I	E	S	G	I	P	L	V	Q	A	F	D	I	V	A	K	Q	S	N	K	R	L	K	D	L	I	E	T	I	K	H	D	I	E	T	G	L	T	L	A	E	S	L	I	K	H	P	L	Y	F	N	E	L	F	C	N	L	V	D	A	G	E	K	S	G	S	L	147	
NTDB	id	1198	PSJM300	03950	AFN76868.1		D	I	A	L	F	T	R	Q	M	A	T	M	K	A	G	V	P	L	L	Q	S	F	D	I	I	G	E	G	F	D	N	P	N	M	R	K	L	V	D	D	L	K	Q	E	V	A	A	G	N	S	F	A	S	S	L	R	K	K	P	Q	Y	F	D	D	L	Y	C	N	L	V	D	S	G	E	Q	S	G	S	L	146	
NTDB	id	1016	ACIAD	RS01680	WP	004920476.1	D	I	A	I	F	T	R	Q	L	A	T	M	M	K	A	G	V	P	L	V	Q	A	F	E	I	V	A	E	G	L	E	N	P	A	M	R	D	V	V	L	G	L	K	N	E	V	E	G	G	N	T	F	A	G	A	L	R	K	Y	P	Q	Y	F	D	N	L	F	C	S	L	I	E	S	G	E	Q	S	G	S	L	149
NTDB	id	302822	DT536	RS03135	WP	010325767.1	D	I	T	I	F	T	R	Q	L	A	T	M	M	K	A	G	V	P	L	V	Q	F	E	I	V	A	E	G	L	E	N	P	S	M	R	E	V	V	L	G																																									

NTDB	id	1029	TT	RS02230	WP	011228203.1	DLILDRLASFLEKELELRGKIRSAMTYPVIVFVFAVGVAAYFLLTGIVPQFAQILTDLGSELPLLTRFLIAVSDLLRAATL	224
NTDB	id	1402	DSB67	RS12670	WP	010643257.1	SQVFERLATYREKSEQLRRAKVIKALIYPAMVVLVALGVSYLMLTRVVIPEFEKMFRTGFGADLPFTQMVLNLSAWTQNWGP	227
NTDB	id	1169	A1552VC	RS11075	WP	000648511.1	PEVFERLATYREKSEQLRRAKVIKALIYPMSVVLVALGVSYLMLTMVVIPEFESMFKGFGAELPWFTQQVVLKLSHWVQAYSL	228
NTDB	id	1112	NGFG	RS09215	WP	003689811.1	ESLLDKLAIYKEKTQAIRKKVKKTALTYPVSVIAVAIGLVFMMIFVLPAFKFEVYANMGAELPALTQTVMDSDFVSYGW	230
NTDB	id	1113	AAA85695.1	219..1451()			ESLLDKLAIYKEKTQAIRKKVKKTALTYPVSVIAVAIGLVFMMIFVLPAFKFEVYANMGAELPALTQTVMDSDFVSYGW	230
NTDB	id	1252	GC085	RS07730	WP	011213805.1	DIMLDKVVATYKEKTEIKKKIKKALTYPVIAVMVVALLVTAGLLIYVVPQFESLFGKFGADLPAMTRAVITMSEFMQAYWY	227
NTDB	id	1198	PSJM300	03950	AFN76868.1		ETLLDRVATYKEKTEALKAKIKKAMNYPVIAVVLVAVIVTAILLIKVVPQFQDVVFANFGAELPAFTLMVIGLSEALQAWWY	226
NTDB	id	1016	ACIAD	RS01680	WP	004920476.1	EIMLDRVAVYKEKSEVLKQKIKKAMKYPATVIVVAIVVTIILMVKVVVPVFKDLFTSFGADLPFTQLVNNMNSNMQDYWF	229
NTDB	id	302822	DT536	RS03135	WP	010325767.1	ETMLDRVAVYKEKSELLKQKIKKAMKYPATVVVVAVIVTIILMVKVVVPVQFELFSSFGADLPFTQMNVNMSWMMQKYWF	229
NTDB	id	1059	ABD1	RS01610	WP	000279215.1	ETMLDRVAVYKEKSELLKQKIKKAMKYPATVIVVAIVVTIILMVKVVVPVQFELFASFGADLPFTQMNVNMSKWMQEYWF	229
consensus							*****! ****!* ** !***!* !*!****!*****!*****! !**** !**** !****!****!****!****	

NTDB	id	1029	TT	RS02230	WP	011228203.1	P	L	L	L	L	A	V	A	L	F	F	A	Y	R	W	Y	Y	G	T	P	Q	G	R	R	V	I	D	R	L	K	L	R	L	P	V	F	G	N	L	N	R	K	T	A	V	A	R	F	S	R	T	L	A	L	L	S	S	G	V	N	I	V	E	A	L	D	I	T	K	G	T	A	G	N	S	V	V	E		303	
NTDB	id	1402	DSB67	RS12670	WP	010643257.1	F	I	G	L	S	F	V	S	L	I	S	G	K	I	M	S	Q	R	S	D	S	F	R	L	L	A	A	R	S	S	L	R	V	P	I	L	G	P	V	L	S	K	A	A	I	A	K	F	S	R	T	L	A	T	S	F	S	A	G	I	P	I	L	T	A	L	K	T	T	S	K	T	S	G	N	M	H	Y	Q		307
NTDB	id	1169	A1552VC	RS11075	WP	000648511.1	W	A	R	I	A	T	A	A	A	I	F	G	L	K	A	L	K	N	S	F	Q	I	R	L	K	T	S	R	L	G	L	K	F	P	I	I	G	N	V	L	A	K	A	I	A	K	F	S	R	T	L	A	T	S	F	A	A	G	I	P	I	L	A	S	L	K	T	T	A	K	T	S	G	N	V	H	F	E		308	
NTDB	id	1112	NGF	RS09215	WP	003689811.1	M	V	L	I	A	L	G	F	A	I	F	G	F	L	K	L	K	A	S	I	K	I	Q	R	R	M	D	A	I	L	L	R	M	P	I	F	G	D	I	V	R	K	G	T	I	A	R	W	G	R	T	T	A	T	L	F	A	A	G	V	P	L	V	D	L	S	T	A	G	A	G	N	L	I	Y	E		310			
NTDB	id	1113	AA85695.1		219..1451()		M	V	L	I	A	L	G	F	A	I	F	G	F	L	K	L	K	A	S	I	K	I	Q	R	R	M	D	A	I	L	L	R	M	P	I	F	G	D	I	V	R	K	G	T	I	A	R	W	G	R	T	T	A	T	L	F	A	A	G	V	P	L	V	D	L	S	T	A	G	A	G	N	L	I	Y	E		310			
NTDB	id	1252	GCO85	RS07730	WP	011213805.1	I	I	F	G	A	L	G	G	V	V	S	F	F	Y	A	K	N	S	L	E	F	A	Q	T	I	D	R	V	M	L	K	L	P	V	I	G	P	I	L	E	K	A	A	I	A	R	F	A	R	T	L	S	I	T	F	A	A	G	L	P	L	V	E	A	L	K	S	V	A	G	A	T	G	N	I	I	Y	A		307	
NTDB	id	1198	PSJM300	03950	AFN76868.1		V	V	L	A	G	F	V	C	A	A	Y	A	F	K	Q	A	H	T	R	S	E	K	F	R	N	W	F	D	R	L	M	L	K	V	P	V	V	G	D	I	L	Y	K	S	S	V	A	R	F	A	R	T	L	S	T	T	F	A	A	G	V	P	L	V	D	A	L	S	V	A	G	A	T	G	N	V	V	F	R		306
NTDB	id	1016	ACIAD	RS01680	WP	004920476.1	I	L	I	I	V	I	C	A	A	I	A	G	F	L	E	A	R	K	R	S	K	R	F	R	D	Q	L	D	R	L	V	L	R	L	P	I	V	G	D	L	V	Y	K	A	I	A	R	Y	S	R	T	L	A	T	T	F	A	A	G	V	P	L	I	D	A	L	A	S	T	A	G	A	T	N	N	T	V	Y	E		309
NTDB	id	302822	DT536	RS03135	WP	010325767.1	I	L	I	I	V	V	G	V	V	I	T	A	L	L	E	T	K	K	R	S	K	K	F	R	D	M	L	D	K	A	A	L	K	A	P	I	F	G	D	L	V	Y	K	A	I	A	R																																		

NTDB id 1029	TT RS02230 WP 011228203.1	EIVAAKILKIQQGDPLNLTLAQHFPVFPPMVSSMVAIGEETGALDTMLSKVADFYEREVDEAVASLTAAGIEPLMIIFLGV	383
NTDB id 1402	DSB67 RS12670 WP 010643257.1	LATEEYRDTAACMPMYIAMR.HCHVPFPELVLMVMIGEESGRLLDMLNKIAAIYEFVDNITVDNLISKILEPLIIVFLGV	386
NTDB id 1169	A1552VC RS11075 WP 000648511.1	TATNEVYRDTAACMPMYIAMR.NTEAFPEPMVLQMVMIGEESGLDDMLNKFVATIYEFVDNITVDNLGKILEPLIIVFLGT	387
NTDB id 1112	NGFG RS09215 WP 003689811.1	EATREIRTRVIQGLSMTSGMR.ATELFPNMMLQMSSIIGEESSLDDMLNKAAEFYEDVDNAVGRLSAMMEPIIIVILGL	389
NTDB id 1113	AAA85695.1 219..1451()	EATREIRTRVIQGLSMTSGMR.ATELFPNMMLQMSSIIGEESSLDDMLNKAAEFYEDVDNAVGLWSAMMEPIIILILGI	389
NTDB id 1252	GCO85 RS07730 WP 011213805.1	KATDKIREDVATCQQMFIAEM.NTHLPFNMQIMVAIGEESGALDEKMLSKVADFYEDEVNAVDALLSLEPIIMSILGI	386
NTDB id 1198	PSJM300 03950 AFN76868.1	SATNKIKSDVSSCMQLNFMSMR.TTGTFFPMAVQMTAIGEESGALDEMLSKVATFYEDVDNMVDGLTALMEPMIMAVLGV	385
NTDB id 1016	ACIAD RS01680 WP 004920476.1	QAVLKIREDVSTGQQLNFAMR.VSNRFPTMAIQMVAIGEESGALDEMLDKVANYYESEVDHAYVDGLTSMMPEPLIMAILGI	388
NTDB id 302822	DT536 RS03135 WP 010325767.1	EAVMKIREDVATCQQQLQFAMR.ATNKFPSMAVQMVAIGEESGALDAMLDKVATHYENVDNAVVDGLTAMMEPLIMAVLGV	388
NTDB id 1059	ABD1 RS01610 WP 000279215.1	KAVMKIREDVATCQQQLQFAMR.ISNRFPSMAIQMVAIGEESGALDSMLDKVATYYENVDNAVVDGLTSMMPEPLIMAILGV	388
consensus		* * * * *	

NTDB	id	1029	TT	RS02230	WP	011228203.1	IVGMIVAGMFLPLFKIIGT	LSVQ	406
NTDB	id	1402	DSB67	RS12670	WP	010643257.1	VVGGLVITAMYLPIFNLMSVL	G..	407
NTDB	id	1169	A1552VC	RS11075	WP	000648511.1	VVGGLVVAMYLPIFNLMSVL	G..	408
NTDB	id	1112	NGFG	RS09215	WP	003689811.1	VIGTLLVAMYLPLFNLGNVV	GA..	410
NTDB	id	1113	AAA85695.1	219..1451()			VIGTLLVAMYLPLFNLGNVVA*		410
NTDB	id	1252	CG085	RS07730	WP	011213805.1	LVGGLVVAMYLPIFKLGS	AV...	406
NTDB	id	1198	PSJM300	03950	AFN	76868.1	LVGGLIIAMYLPIFQMGSV	V...	405
NTDB	id	1016	ACIAD	RS01680	WP	004920476.1	LVGGLVIAMYLPIFQMGSV	V...	408
NTDB	id	302822	DT536	RS03135	WP	010325767.1	LVGGLVIAMYLPIFQMGSV	V...	408
NTDB	id	1059	ABD1	RS01610	WP	000279215.1	LVGGLVIAMYLPIFQMGSV	V...	408
consensus							***!*****!***!***!*****		

- X non conserved
- X similar
- X > 50% conserved