

NTDB id	458	SSUD9 RS00355 WP 002935296.1	MNDKEFGQQRVRQLRESASMTREQFCDDLELSVRQLTRIEAGASKPTFSKIQVIATRLCMGLYELM.PDYVSLPERYSKL	79
NTDB id	455	SSU RS00330 WP 012774888.1	MNDKEFGQQRVRQLRESASMTREQFCDDLELSVRQLTRIEAGASKPTFSKIQVIATRLCMGLYELM.PDYVSLPERYSKL	79
NTDB id	465	SSU05 0053 ABP89025.1	MEVWFMNDKEFGQQRVRQLRESASMTREQFCDDLELSVRQLTRIEAGASKPTFSKIQVIATRLCMGLYELM.PDYVSLPERYSKL	84
NTDB id	451	SPYM18 RS00325 WP 002986681.1	MLEHFGGKKVKVLRLEKRISRREDLCGDESEL SVRQLARIELQGSIPLSKVIFIAKALNVSVGYLTDGADLELPKRYKEL	79
NTDB id	443	SPYM3 RS00325 WP 011054099.1	MLEHFGGKKVKVLRLEKRISRREDLCGDESEL SVRQLARIELQGSIPLSKVIFIAKALNVSVGYLTDGADLELPKRYKEL	79
NTDB id	45	SMU RS00375 WP 002263400.1	MLKD FGKKIKSLRLEKG LTK EAVCLDES QLS TRQL TRIES GQS TPTLN KAVYIAC RLG VTL GYL TDGC ENVELPS RYKEL	79
NTDB id	48883	SGGB RS00295 WP 009853198.1	MEK FGIKVRA LREKKIGISREEFGD ETELS VRQLARIEKG QS SVPTLNKYIAKVLGVTVTIGELTDGKNLELPTRYKEL	78
NTDB id	555	STRINF RS01865 WP 174221231.1	MREEKEISR EEF CGDETELS VRQLARIELNQSIPNLKSASFIA N RLGVK LGTLTDGCSILELPKRYKEL	68
consensus			* * * * *	

NTDB id 458 SSUD9 RS00355 WP 002935296.1	KFDVLRTPTYG	NEDLAEKR	DAMMT	EIYDDYYDE	LPPEEEKI	IVVDTL	CSLFDVLD	TSQEV	CKE	FLD	DYLH	QSYHRSKLS	INDLMIL	164
NTDB id 455 SSU RS00330 WP 012774888.1	KFDVLRTPTYG	NEDLAEKR	DAMMT	EIYDDYYDE	LPPEEEKI	IAIDAI	QSRIDT	LESGTAG	FCKE	ILED	EDYEQ	IFRKRKY	VELNDLLIV	164
NTDB id 465 SSU05 0053 ABP89025.1	KFDVLRTPTYG	NEDLAEKR	DAMMT	EIYDDYYDE	LPPEEEKI	IAIDAI	QSRIDT	LESGTAG	FCKE	ILED	EDYEQ	IFRKRKY	VELNDLLIV	169
NTDB id 451 SPYM18 RS00325 WP 002986681.1	KYLILRTPTYM	DDGKLQVREEQ	FDEIF	FEDYYD	KLPEEEKI	ID	CLQATD	DTLLE	SENTN	FGID	LQEVFN	IKTKVFR	RQNDLILL	164
NTDB id 443 SPYM3 RS00325 WP 011054099.1	KYLILRTPTYM	DDGKLQVREEQ	FDEIF	FEDYYD	KLPEEEKI	VAVDI	CAKFEVYQ	IGDIN	FGYS	ILKE	FLPQL	KRKSIY	NINELLLI	164
NTDB id 45 SMU RS00375 WP 002263400.1	KYLLLRTPTYG	DQQLAEKET	YFDEIF	ESQFYDD	LPPEEQ	LI	IDGLQSK	IDHFS	DNID	FCVG	ILNDY	FQILR	KNTYQVNDLILI	164
NTDB id 48883 SGG B RS00295 WP 009853198.1	KYLLLRTPTYG	DKERLKRQTS	FDEIF	SEKYYEV	IPPEER	LI	IDCLQSK	IDVHFS	DDVN	FGEG	ILNDY	FQVNR	KKNFTINDLILI	163
NTDB id 555 STRINF RS01865 WP 174221231.1	KYLLLRTPTYG	DQVRLDRKNDY	FDEIAE	VFYDV	IPPEER	LI	IDCLQSK	FVHFS	DDVN	FGEG	ILNDY	FQVNR	KKNFTINDLILI	153
consensus	!***!!!!!!**	* ** *	* ** *	**!!****	*****	*****	!*****	*****	*	*	***	!* **	* ** *!	***

NTDB id 458	SSUD9 RS00355 WP 002935296.1	RLFI	EH	CQ	LED	LS	V	G	T	S	N	Y	A	L	F	T	D	L	I	E	K	L	P	Q	S	I	Y	D	V	H	S	E	S	L	F	I	V	R	D	L	F	A	I	V	R	I	L	F	S	K	E	L	N	H	I	P	V	Y	I	E	K	I	E	N	I	M	E	L	S	Q	D	F	Q	K	K	P	249						
NTDB id 455	SSU RS00330 WP 012774888.1	RLH	L	E	Y	V	R	L	S	S	.	.	C	D	S	E	I	F	R	Q	F	L	K	I	I	E	H	L	H	E	Q	I	N	I	N	S	N	D	L	F	V	L	R	D	T	L	L	S	C	V	N	I	L	G	S	K	Y	Y	E	P	I	P	K	I	F	D	S	V	D	K	I	I	Q	S	T	Q	D	F	Q	K	K	P	247
NTDB id 465	SSU05 0053 ABP89025.1	RLH	L	E	Y	V	R	L	S	S	.	.	C	D	S	E	I	F	R	Q	F	L	K	I	I	E	H	L	H	E	Q	I	N	I	N	S	N	D	L	F	V	L	R	D	T	L	L	S	C	V	N	I	L	G	S	K	Y	Y	E	P	I	P	K	I	F	D	S	V	D	K	I	I	Q	S	T	Q	D	F	Q	K	K	P	252
NTDB id 451	SPYM18 RS00325 WP 002986681.1	E	L	Y	L	A	I	D	I	E	G	M	D	Q	Y	S	D	K	I	F	Y	S	D	L	N	L	S	E	Q	F	E	Q	F	E	L	D	E	L	F	I	V	N	K	I	I	D	I	S	S	S	L	K	N	R	L	D	N	L	E	K	A	T	E	M	S	S	Q	K	I	M	A	K	I	Q	D	W	N	R	M	P	249		
NTDB id 443	SPYM3 RS00325 WP 011054099.1	D	L	Y	L	I	I	L	V	V	S	H	F	S	D	D	I	F	D	V	Q	F	Y	E	E	I	T	S	M	L	K	Q	H	N	N	S	L	E	D	L	F	L	N	N	I	L	S	C	A	D	T	Y	I	R	L	K	M	F	G	H	L	K	E	T	L	Q	L	S	H	F	I	M	S	T	I	Q	D	F	Q	K	M	P	249
NTDB id 45	SMU RS00375 WP 002263400.1	D	L	Y	F	S	C	L	T	V	S	G	L	D	S	A	I	F	D	S	R	K	Y	N	Q	L	E	T	L	L	K	Q	V	D	C	L	P	L	E	D	L	F	V	L	N	V	L	N	N	F	G	L	L	E	L	K	K	Y	D	F	V	K	Q	L	I	A	V	S	N	K	I	M	D	R	T	H	D	F	Q	K	K	P	249
NTDB id 48883	SGGB RS00295 WP 009853198.1	D	L	Y	F	A	C	L	A	S	A	K	S	F	V	G	I	Y	S	L	D	L	Y	D	E	L	M	E	C	L	N	Q	E	N	L	S	P	E	T	S	L	L	N	N	V	L	N	N	V	D	L	V	L	R	F	H	R	E	S	F	M	K	R	I	I	K	S	D	T	I	M	T	S	V	H	D	F	Q	R	R	P	247	
NTDB id 555	STRINF RS01865 WP 174221231.1	D	L	Y	F	A	C	L	S	S	A	K	K	F	E	G	I	Y	S	L	D	F	Y	D	L	M	K	R	L	V	N	Q	K	H	V	S	P	E	T	D	L																																										

NTDB id 458 SSUD9 RS00355 WP 002935296.1	TLNLVKKWKYELKVKQHHEIAERYNEAITFASL	LNQFHLKEKIQMEWEKDTQSLKR	305
NTDB id 455 SSU RS00330 WP 012774888.1	IVSVLKWKYALFVDKDRDEAEKHYLDAVLFAKL	LIENRELECKTEEDWRVDNQ....	299
NTDB id 465 SSU05 0053 ABP89025.1	IVSVLKWKYALFVDKDRDEAEKHYLDAVLFAKL	LIENRELECKTEEDWRVDNQ....	304
NTDB id 451 SPYM18 RS00325 WP 002986681.1	ILKLIEWKYYFLIKQDKIIAEQSFMKACLFQAQ	MTADQYLENKLIIQWEKDVKSY..	303
NTDB id 443 SPYM3 RS00325 WP 011054099.1	MYCMYEWKLSIFYLKDINRARNYFEQSILFTQM	TGDTYLVCKLRGEWNKDIHYI..	303
NTDB id 45 SMU RS00375 WP 002263400.1	IVNLLITWKHHLFVEKDYAEAKKSYDAAILFAQL	TENINLRENLEKEWQKDSQNGT.	304
NTDB id 48883 SGG B RS00295 WP 009853198.1	VLSLVEWKYYLQFKKDFLAQKSSYSNAILFANL	IGDTYLENKLIEEWNNDTT....	299
NTDB id 555 STRINF RS01865 WP 174221231.1	ILSLVEWKYYLKLKHFALAEQSFNTATLFARLV	GDTYLENKLKEWQLDIDAVE.	292
consensus	*** ** ! ! * * * *	*** * ** * ! * * *	! **** * ! !

 non conserved
 similar
 $\geq 50\%$ conserved