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NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
NTDB id 228 SPD RS09265 WP 001085462.1
NTDB id 194 SPR RS08825 WP 001085462.1
NTDB id 159 SP RS09750 WP 001085462.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
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NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 216606 BZJ79 RS06400 WP 000368166.1
NTDB id 115 BSU 16940 NP 389576.2
NTDB id 1313 DR RS12030 WP 010888966.1
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NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1205 PSJM300 05545 AFN77183.1

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	MAK	K	KK	EE	SKK	FE	DE	K	KAL	AA	AL	KQ	IEK	FGK	SIM	RLG	E	AEQ	Y	VO	ST	SL	D	AL	G	Y	GG	Y	PK	GR																																										
MATK	...	K	K	T	F	D	D	I	T	K	K	Y	G	A	E	R	D	K	A	L	A	D	A	L	A	L	I	E	K	D	F	G	K	S	I	M	R	L	G	E	A	.	A	N	Q	K	V	S	V	S	S	G	S	L	A	L	D	I	A	L	G	A	G	G	Y	P	K	G	R	74		
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NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1205 PSJM300 05545 AFN77183.1
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NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus



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NTDB id 600 KW2 RS01765 WP 011675413.1	SVRLDVRGSTKIEEGS.GDNKTQIGKITKIKVVKNKVAPPFKEAVALVDIMFGEGISSTGELINIAVEEGITIKKSGAWFAYN	312
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NTDB id 228 SPD RS09265 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKEAVVEIMY GEGISKTGELLKIASDLDI IKKAGAWYSYK	311
NTDB id 194 SPR RS08825 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKEAVVEIMY GEGISKTGELLKIASDLDI IKKAGAWYSYK	311
NTDB id 159 SP RS09750 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKETNVGKETKIKVVKNKVAPPFKEAVVEIMY GEGISKTGELLKIASDLDI IKKAGAWYSYK	311
NTDB id 499 SM12261 RS08315 WP 078228268.1	SVRLDVRGSTQIKGTG.DQKDTNVGKETKIKVVKNKVAPPFKEAFVEIMY GEGISKTGELLKIASDLDI IKKAGAWYSYK	311
NTDB id 527 SMSK321 RS11065 WP 001085454.1	SVRLDVRGSTQIKGTG.DQKDTNVGKETKIKVVKNKVAPPFKEAFVEIMY GEGISKTGELLKIASDLDI IKKAGAWYSYK	311
NTDB id 453 Spy49 1753c ACI62003.1	SVRLDVRGTTQIKGTG.DQKDSNIGKETKIKVVKNKVAPPFKEAEVEIMY GEGISRTGELVKIASDLDI IQKAGAWFSYN	311
NTDB id 408 SMU RS09530 WP 002262392.1	SVRLDVRGNTQIKGTG.EQKDSNIGKETKIKVVKNKVAPPFKEAFVEI IY GEGISRTGELVKIASDLGI IQKAGAWYSYN	311
NTDB id 625 LCA RS02525 WP 011374196.1	TVRLEVRRRAETIKNGT.....DMIGNRARIKVVKNKVAPPFKEAEVDIMY GQGISRTGELVDMAVEKDI INKSGSWYSYG	294
NTDB id 216606 BZJ79 RS06400 WP 000368166.1	SVRLEVRRRAEQLKQGQ.....EIVGNRTKIKVVKNKVAPPFRVAEVDIMY GQGISKEGELIDLGVENDIVDKSGAWYSYN	293
NTDB id 115 BSU 16940 NP 389576.2	SVRLEVRRRAEQLKQGN.....DVMGNKTKIKVVKNKVAPPFR TAEVDIMY GEGISKEGEITIDLGTELDIVQKSGSWYSYE	292
NTDB id 1313 DR RS12030 WP 010888966.1	SVRLDVRKIGQ....PTKVGNDAAVANTVKIKTVKNKVAAPFKEVELALIVYGKGFQDLSDLVGLAADMDI IKKAGSFYSYG	307
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NTDB id 1334 RAOC RS04870 WP 004918236.1	SVRIDIRRLSDTGKIKDKSGEVI GNRTKVVKNKVAPPFKSAEFDIMY GEGVSKVGEILDVATDLDI IQKSGSWFSYQ	307
NTDB id 1389 A4U84 RS07560 WP 021112712.1	SVRLDIRRCGV....V.KDGDEIIGSETKVVKNKVAPPFR EVQFDIMY GEGISRMNELLILAEANGFIKKSGAWFSYD	310
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NTDB id 1124 NGFG RS03960 WP 003688695.1	SVRLDIRRTGS....I.KKGEVVLGNETRVKVIKNKVAPPFRQAEFDILY GEGISWEGELIDIGVKNDI INKSGAWYSYN	294
NTDB id 1123 OK783 RS03845 WP 003688695.1	SVRLDIRRTGS....I.KKGEVVLGNETRVKVIKNKVAPPFRQAEFDILY GEGISWEGELIDIGVKNDI INKSGAWYSYN	294
NTDB id 1427 RS RS02760 WP 011000510.1	SVRLDIRRIGS....I.KKGEVVLGNETKVVKNKVAPPFR EAI FDI LY GAGVSREGEITDLGVEAKVVEKSGAWYSYN	302
NTDB id 1165 A1552VC RS01565 WP 000344154.1	SVRLDIRRTGA....I.KEGEEVVGNETRIKVVKNKIAAPFKEANTQIMY GQGFNREGELIDLGVKHKMVEKSGAWYSYN	293
NTDB id 1142 GTF74 RS11550 WP 000344154.1	SVRLDIRRTGA....I.KEGEEVVGNETRIKVVKNKIAAPFKEANTQIMY GQGFNREGELIDLGVKHKMVEKSGAWYSYN	293
NTDB id 1022 ACIAD RS06390 WP 004925639.1	SVRLDIRRIGQ....V.KEGDEIIGSETKVVKNKMAPPFR EAI FQI LY GKGVTNQLGELVDLAVQQNIVQKAGAWYSYQ	293
NTDB id 1074 ABD1 RS10195 WP 000344167.1	SVRLDIRRIGQ....V.KEGDEIIGSETKVVKNKMAPPFKEAIFQI LY GKGVTNQLGELVDLAVQQDIVQKAGAWYSYQ	293
NTDB id 1205 PSJM300 05545 AFN77183.1	SVRLDIRRTGA....V.KEGDEVVGSETRVKNKVAPPFRQAEFQI LY GKGVIYRNGEITDLGVQQGLVEKSGAWAYK	293
consensus	*!!**!*~*~*****!*****!!*~*~*****!~*~*****~***~!!*****!	

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NTDB id 600 KW2 RS01765 WP 011675413.1	DEKIGQGA	EKAKNYLKEHQDV	DEIDHKVRAAHG	LDDSEVAETEEETT	ASKTKAKAKKEEK	AVETEEIELELED		387
NTDB id 269 KZH43 RS08665 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTEN	KKDE....PKKEEA	..VNEEVPLDLG	DELEIE	385
NTDB id 228 SPD RS09265 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTEN	KKDE....PKKEEA	..VNEEVPLDLG	DELEIE	385
NTDB id 194 SPR RS08825 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTEN	KKDE....PKKEEA	..VNEEVPLDLG	DELEIE	385
NTDB id 159 SP RS09750 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTEN	KKDE....PKKEEA	..VNEEVPLDLG	DELEIE	385
NTDB id 499 SM12261 RS08315 WP 078228268.1	DEKIGQGS	ENAKKYLAADNPEIF	DEIDHQVRVQFGL	IDGEEIAES....	KKDE....AAQVDS	..VNEEVTLDLG	DELEIE	381
NTDB id 527 SMSK321 RS11065 WP 001085454.1	DEKIGQGS	ENAKKYLAADNPEV	FAEIDHQVRVQFGL	IDGEEAAES....	KKDE....VAQVDS	..VNEEVTLDLG	DELEIE	381
NTDB id 453 Spy49 1753c ACI62003.1	GEKIGQGS	ENAKRYLADHPQLF	DEIDRKVRVKFGL	LEESEEEESAMAV	ASE.....E.....	TDDLALDLDN	GIEIE	377
NTDB id 408 SMU RS09530 WP 002262392.1	GEKIGQGS	ENAKKFLADNPEIF	DDIDHKVRVQYGL	IEEDNTEEEKQSS	KEK.....ETDEK	..ADKNLVLELD	DDTIELE	382
NTDB id 625 LCA RS02525 WP 011374196.1	SERIGQG	RENAKNYLADHED	VEDEVRLKVRAAY	GISDVPEEDLPTTE	DEQINILPDDSTEE	.....		355
NTDB id 216606 BZJ79 RS06400 WP 000368166.1	GERMGQG	KENVKMYLKENPQ	IKKEIDRKLREKL	GISDGDVEETEDA	...PKSLFDEE	.....		347
NTDB id 115 BSU 16940 NP 389576.2	EERLGQG	RENAKQFLKENKD	IMLMIQEQIREHY	GLDNNGVVQQAEET	QEELEFEE	.....		348
NTDB id 1313 DR RS12030 WP 010888966.1	DERIGQG	KEKTIAYIAERP	EMEQUEIRDRVMAA	IRAGNAGEAPALAP	APAAPEAAEA	.....		363
NTDB id 1245 Cj1673c YP 002345041.1	DKKLGQG	RENSKAFLENPEI	ADEITKAIQNSMG	IEGMI....SGSEDD	..EGEE			343
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NTDB id 1214 NCTC11637 00359 SQJ03206.1	DKKLGQG	RENAKALLKEDKA	LADAITLKIKESIG	SNEEI....MPLPDE	..PLEEME			347
NTDB id 1334 RAOC RS04870 WP 004918236.1	DTKLGQGR	DTVKELIKDNPELA	EELEAKIREKLQAK	.....				343
NTDB id 1389 A4U84 RS07560 WP 021112712.1	GTKIGQG	KNNVAVKWLKENP	EIADKLEQEIRNTLA	SNPNS....VLKATAS	DSNDESD..VEEFSE	EEEL	.....	372
NTDB id 1130 NGFG RS03960 WP 003688695.1	GAKIGQG	KDNVRVWLKENPE	ISDEIDAKIRALNG	VEMHI....TEGTQDE	TDGER.....PEE	.....		348
NTDB id 1124 NGFG RS03960 WP 003688695.1	GAKIGQG	KDNVRVWLKENPE	ISDEIDAKIRALNG	VEMHI....TEGTQDE	TDGER.....PEE	.....		348
NTDB id 1123 OK783 RS03845 WP 003688695.1	GAKIGQG	KDNVRVWLKENPE	ISDEIDAKIRALNG	VEMHI....TEGTQDE	TDGER.....PEE	.....		348
NTDB id 1427 RS RS02760 WP 011000510.1	GERIGQGR	DNCREFLRENAEL	AREIENKVREHLGV	TPMG....AVTLA	..EEVEED	.....		352
NTDB id 1165 A1552VC RS01565 WP 000344154.1	GDKIGQG	KANACKYILKENPE	IAKTLDDKKLREML	LNPNM....QLIAET	SSAADDVE..FGAVP	EEF	.....	354
NTDB id 1142 GTF74 RS11550 WP 000344154.1	GDKIGQG	KANACKYILKENPE	IAKTLDDKKLREML	LNPNM....QLIAET	SSAADDVE..FGAVP	EEF	.....	354
NTDB id 1022 ACIAD RS06390 WP 004925639.1	GNKIGQG	KNNVIRYLEENPQ	ISTEIEAVIREQLLT	KASD....QTAA	..HDETEEEPD	..LL..ES	.....	349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	GNKIGQG	KNNVIRYFEENNQ	IAEEIERNIREQLLT	TGTN....GAVQ	..I..EDEEEPD	..LL..LES	.....	349
NTDB id 1205 PSJM300 05545 AFN77183.1	GSKIGQG	KANAACKYLEENPE	IGQIEEQIRAKLLV	TSAN....TKATPVA	EADLADAD..I			347
consensus	***!!!	*****	**	*****	*****	**	**	

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		IEE	
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NTDB id 269 KZH43 RS08665 WP 001085462.1	IEE	388	
NTDB id 228 SPD RS09265 WP 001085462.1	IEE	388	
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NTDB id 499 SM12261 RS08315 WP 078228268.1	IEE	384	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	IEE	384	
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NTDB id 408 SMU RS09530 WP 002262392.1	D..	383	
NTDB id 625 LCA RS02525 WP 011374196.1	...	355	
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NTDB id 1074 ABD1 RS10195 WP 000344167.1	...	349	
NTDB id 1205 PSJM300 05545 AFN77183.1	...	347	
consensus			

- X non conserved
- X similar
- X ≥ 50% conserved