

Logo



NTDB id 600 KW2 RS01765 WP 011675413.1	MATK...KKTNFDDITKKYGAERD	KALADALAL	IEKD	FGKGS	IMRLGER	A	ANQKV	SVV	SS	SGSLALD	I	ALG	AGGY	PKGRI	75						
NTDB id 269 KZH43 RS08665 WP 001085462.1	.MAK...KPKKLEEISKKFGEARE	EKALNDALKL	IEKD	FGKGS	IMRLGER	A	AEQKV	QVM	SS	SGSLALD	I	ALG	SGGY	PKGRI	74						
NTDB id 228 SPD RS09265 WP 001085462.1	.MAK...KPKKLEEISKKFGEARE	EKALNDALKL	IEKD	FGKGS	IMRLGER	A	AEQKV	QVM	SS	SGSLALD	I	ALG	SGGY	PKGRI	74						
NTDB id 194 SPR RS08825 WP 001085462.1	.MAK...KPKKLEEISKKFGEARE	EKALNDALKL	IEKD	FGKGS	IMRLGER	A	AEQKV	QVM	SS	SGSLALD	I	ALG	SGGY	PKGRI	74						
NTDB id 159 SP RS09750 WP 001085462.1	.MAK...KPKKLEEISKKFGEARE	EKALNDALKL	IEKD	FGKGS	IMRLGER	A	AEQKV	QVM	SS	SGSLALD	I	ALG	SGGY	PKGRI	74						
NTDB id 499 SM12261 RS08315 WP 078228268.1	.MAK...KPKKLDEISKKFGEARE	EKALNDALKL	IEKD	FGKGS	IMRLGER	A	AEQKV	QVM	SS	SGSLALD	I	ALG	SGGY	PKGRI	74						
NTDB id 527 SMSK321 RS11065 WP 001085454.1	.MAK...KPKKLDEISKKFGEARE	EKALNDALKL	IEKD	FGKGS	IMRLGER	A	AEQKV	QVM	SS	SGSLALD	I	ALG	SGGY	PKGRI	74						
NTDB id 1129469 STREPSUIS RS00385 WP 023369045.1	MAKK...PTKKLEDITKKFGR	DERKKALDDALKS	IEKD	FGKGA	VMLRGER	A	AEQKV	QVM	SS	SGSL	SLD	I	ALG	AGGY	PKGRI	75					
NTDB id 408 SMU RS09530 WP 002262392.1	.MAK...RIKKTEEITKKFGR	DERKKALDDALKN	IEKD	FGKGA	VMLRGER	A	AEQKV	QVM	SS	SGSLALD	I	ALG	AGGY	PKGRI	74						
NTDB id 453 Spy49 1753c ACI62003.1	.MAK...KLKKNEEITKKFGR	DERKKALDDALKN	IEKD	FGKGA	VMLRGER	A	AEQKV	QVM	SS	SGSLALD	I	ALG	AGGY	PKGRI	74						
NTDB id 625 LCA RS02525 WP 011374196.1	.....MAKDERQAALDAAL	KKIEKN	FGKGS	IMRM	GEEK	V	DTQV	STV	SS	SGSLALD	E	ALG	VGGY	PRGRI	61						
NTDB id 115 BSU 16940 NP 389576.2	.....MSDRQAALDMALKQ	IEKQ	FGKGS	IMKL	GEEK	T	DTR	I	STV	PS	SGSLALD	T	ALG	IGGY	PRGRI	59					
NTDB id 1313 DR RS12030 WP 010888966.1	.....MSKDATKEISAPTD	AKERSKAT	ETAM	SQIEKA	FGKGS	IMKL	GAE	SKLD	VQV	ST	SGSL	SLD	I	ALG	VGGI	PRGRI	73				
NTDB id 1245 Cj1673c YP 002345041.1	.....MDNKRKSLDAALKS	LDKTF	FGKT	ILRL	GDK	E	VEQ	IDS	IGT	GS	VGLD	LALG	IGV	PKGRI	60						
NTDB id 1211 C694 RS00795 WP 000963128.1	.....MAIDEDKQKATISLA	IKQID	KV	FGKGA	LVRL	GDK	Q	VEK	IDS	IST	SGSL	GLD	LALG	IGV	PKGRI	62					
NTDB id 1214 NCTC11637 00359 SQJ03206.1	.....MAIDEDKQKATISLA	IKQID	KV	FGKGA	LVRL	GDK	Q	VEK	IDA	IST	SGSL	GLD	LALG	IGV	PKGRI	62					
NTDB id 1334 RAOC RS04870 WP 004918236.1	.....MAKT..ETTSPNDD	KKKALAAV	LEKLD	KTY	GKGT	VM	KLGD	GT	V	DHN	IEV	IP	SGSL	GLD	LALG	VGGY	PKGRI	69			
NTDB id 1389 A4U84 RS07560 WP 021112712.1	MAENKKSSKNNTV..VKQ	VEPEQ	KKQ	ALAA	LAQIEKQ	FGKGS	IMKL	GQT	E	QLD	IES	V	ST	SGSL	GLD	LALG	IGGL	PMGRI	77		
NTDB id 1130 NGFG RS03960 WP 003688695.1	.....MSDDKSKALAAALA	QIEKS	FGKGA	IMK	MDGS	Q	Q	EEN	LE	V	IST	SGSL	GLD	LALG	VGGI	PRGRI	61				
NTDB id 1124 NGFG RS03960 WP 003688695.1	.....MSDDKSKALAAALA	QIEKS	FGKGA	IMK	MDGS	Q	Q	EEN	LE	V	IST	SGSL	GLD	LALG	VGGI	PRGRI	61				
NTDB id 1123 OK783 RS03845 WP 003688695.1	.....MSDDKSKALAAALA	QIEKS	FGKGA	IMK	MDGS	Q	Q	EEN	LE	V	IST	SGSL	GLD	LALG	VGGI	PRGRI	61				
NTDB id 1427 RS RS02760 WP 011000510.1	MEDG.....K..KAASMSA	EKKALAAALA	QIEKQ	FGKGS	IMK	MDA	E	VEP	VQV	ST	SGSL	GLD	V	ALG	VGGI	PRGRV	69				
NTDB id 1165 A1552VC RS01565 WP 000344154.1	.....MDENKQKALAAAL	GQIEKQ	FGKGS	IMRL	GDN	R	AM	V	ET	IST	SGSL	SLD	I	ALG	AGGL	PMGRI	60				
NTDB id 1142 GTF74 RS11550 WP 000344154.1	.....MDENKQKALAAAL	GQIEKQ	FGKGS	IMRL	GDN	R	AM	V	ET	IST	SGSL	SLD	I	ALG	AGGL	PMGRI	60				
NTDB id 1074 ABD1 RS10195 WP 000344167.1	.....MDENKSKALQAALS	QIEKQ	FGKNT	VM	RLGDN	T	V	Q	A	VE	AV	ST	GS	LT	L	I	ALG	IGGL	PKGRI	60	
NTDB id 1022 ACIAD RS06390 WP 004925639.1	.....MDNKS	KALQAALS	QIEKQ	FGKNT	VM	RLGDN	T	V	Q	A	VE	AV	ST	GS	LT	L	I	ALG	IGGL	PKGRI	60
NTDB id 1205 PSJM300 05545 AFN77183.1	.....MDENKKRALAAAL	GQIEKQ	FGKGA	V	MR	MDH	DR	QA	IP	S	IST	SGSL	GLD	LALG	IGGL	PKGRI	60				

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NTDB id 600 KW2 RS01765 WP 011675413.1	VEIYGPESSGKTTVALHAVAQAVQKEGGIAAFIDAENALDPEYAKALGVNIDELLISQPDYGEQGLQIAEKLITSGAVDLV	155
NTDB id 269 KZH43 RS08665 WP 001085462.1	VEIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEEHALDPAYAAALGVNIDELLISQPDSGEQGLEIAGKLIDSGAVDLV	154
NTDB id 228 SPD RS09265 WP 001085462.1	VEIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEEHALDPAYAAALGVNIDELLISQPDSGEQGLEIAGKLIDSGAVDLV	154
NTDB id 194 SPR RS08825 WP 001085462.1	VEIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEEHALDPAYAAALGVNIDELLISQPDSGEQGLEIAGKLIDSGAVDLV	154
NTDB id 159 SP RS09750 WP 001085462.1	VEIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEEHALDPAYAAALGVNIDELLISQPDSGEQGLEIAGKLIDSGAVDLV	154
NTDB id 499 SM12261 RS08315 WP 0782228268.1	VEIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEEHALDPAYAAALGVNIDELLISQPDSGEQGLEIAGKLIDSGAVDLV	154
NTDB id 527 SMSK321 RS11065 WP 001085454.1	VEIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEEHALDPAYAAALGVNIDELLISQPDSGEQGLEIAGKLIDSGAVDLV	154
NTDB id 1129469 STREPSUIS RS00385 WP 023369045.1	VEIYGPESSGKTTVALHAVAQAQKDGIIAAFIDAEEHALDPAYAAALGVNIDELLISQPDSGEQGLEIAGKLIDSGAVDLV	155
NTDB id 408 SMU RS09530 WP 002262392.1	VEIYGPESSGKTTVALHAVAQAQKDGIIAAFIDAEEHALDPAYAAALGVNIDELLISQPDSGEQGLEIAGKLIDSGAVDLV	154
NTDB id 453 Spy49 1753c ACI62003.1	VEIYGPESSGKTTVALHAVAQAQKEGGIAAFIDAEEHALDPAYAAALGVNIDELLISQPDSGEQGLEIAGKLIDSGAVDLV	154
NTDB id 625 LCA RS02525 WP 011374196.1	VEIYGPESSGKTTVALHAVAQEVQKQGGTAAYIDAENAMDPKYATALGVNIDELLISQPDTEGEQGLEIADALVSSGAVDIL	141
NTDB id 115 BSU 16940 NP 389576.2	TEVYGPESGKTTVALHATAEVQQQGGQAAFIDAEEHALDPVYAQKLGVNIDELLISQPDTEGEQALEIAEALVRSGAVDIV	139
NTDB id 1313 DR RS12030 WP 010888966.1	TEIYGPESGKTTVALAIVQAQKAGGTCAAFIDAEEHALDPVYARALGVNIDELLISQPDNGEQALEIMELLVRSGATDVI	153
NTDB id 1245 Cj1673c YP 002345041.1	TEIYGPESGKTTVALHIIAECQKAGGVCAFIDAEEHALDVKYAKNLGVNTDLYVVSQPDFGEQALEIVETIARSGAVDLI	140
NTDB id 1211 C694 RS00795 WP 000963128.1	TEIYGPESGKTTVALSLIIAECQKNGGVCAFIDAEEHALDVHYAKRLGVDTENLLVSQPDTEGEQALEILETITRSGGIDLVI	142
NTDB id 1214 NCTC11637 00359 SQJ03206.1	TEIYGPESGKTTVALSLIIAECQKNGGVCAFIDAEEHALDVHYAKRLGVDTENLLVSQPDTEGEQALEILETITRSGGIDLVI	142
NTDB id 1334 RAOC RS04870 WP 004918236.1	VEIYGPESSGKTTVALHIIAQAQKVGTTAAAFIDAEEHAFDMHYAEKLGINLEELIVSQPDNGEQALEIADSLTRSGGVDIV	149
NTDB id 1389 A4U84 RS07560 WP 021112712.1	VEIYGPESSGKTTVALSLIIAQAQKGNKTCAFIDAEEHALDPVYARNLGVNIDELLISQPDNGEQALEICDALVRSGAVDVI	157
NTDB id 1130 NGFG RS03960 WP 003688695.1	VEIFGPESGKTTVALLEVAQCCQKNGGVCAFVDAEEHAFDPVYARKLGVKVEELYLSQPDTEGEQALEICDTLVRSGGIDMV	141
NTDB id 1124 NGFG RS03960 WP 003688695.1	VEIFGPESGKTTVALLEVAQCCQKNGGVCAFVDAEEHAFDPVYARKLGVKVEELYLSQPDTEGEQALEICDTLVRSGGIDMV	141
NTDB id 1123 OK783 RS03845 WP 003688695.1	VEIFGPESGKTTVALLEVAQCCQKNGGVCAFVDAEEHAFDPVYARKLGVKVEELYLSQPDTEGEQALEICDTLVRSGGIDMV	141
NTDB id 1427 RS RS02760 WP 011000510.1	VEIYGPESSGKTTVALQVVAEMQKLGCTCAAFIDAEEHALDVTYADKLGVKVPDLLISQPDTEGEQALEIADALVRSGSVDLI	149
NTDB id 1165 A1552VC RS01565 WP 000344154.1	VEIFGPESGKTTVALLELIAAAQREGKTCAFIDAEEHALDPVYAKKLGVNIDELLISQPDTEGEQALEICDALARSGAVDVI	140
NTDB id 1142 GTF74 RS11550 WP 000344154.1	VEIFGPESGKTTVALLELIAAAQREGKTCAFIDAEEHALDPVYAKKLGVNIDELLISQPDTEGEQALEICDALARSGAVDVI	140
NTDB id 1074 ABD1 RS10195 WP 000344167.1	TEIYGPESGKTTMTLQAIAQCQKSGGTCAAFIDAEEHALDPQYARKLGVDIDNLLVSQPDNGEQALEIADMLVRSGATDLI	140
NTDB id 1022 ACIAD RS06390 WP 004925639.1	VEIYGPESSGKTTMTLQAIAQCQKAGGTCAAFIDAEEHALDPQYARKLGVDIDNLLVSQPDHGEQALEIADMLVRSGATDLI	140
NTDB id 1205 PSJM300 05545 AFN77183.1	VEIYGPESSGKTTVALSVIAAAQRMGSTCAFVDAEEHALDPDYAGKLGVNVDLLVSQPDTEGEQALEITDMLVRSNAVDVI	140
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NTDB id 600 KW2 RS01765 WP 011675413.1	VRLDVRGSTKIEEGS.GDNKTI	IGKI	TKIKVVKNKVAPPFK	VALVD	IMFGEGIS	STGELL	INTAVEEGI	IKKSGAWFAYND	313	
NTDB id 269 KZH43 RS08665 WP 001085462.1	VRLDVRGNTQIKGTG.DQKETN	VGKETKIKVVKNKVAPPFK	EAVVE	IMYGEGIS	KTGELL	LKIASDLD	IIKKA	GAWYSYKD	312	
NTDB id 228 SPD RS09265 WP 001085462.1	VRLDVRGNTQIKGTG.DQKETN	VGKETKIKVVKNKVAPPFK	EAVVE	IMYGEGIS	KTGELL	LKIASDLD	IIKKA	GAWYSYKD	312	
NTDB id 194 SPR RS08825 WP 001085462.1	VRLDVRGNTQIKGTG.DQKETN	VGKETKIKVVKNKVAPPFK	EAVVE	IMYGEGIS	KTGELL	LKIASDLD	IIKKA	GAWYSYKD	312	
NTDB id 159 SP RS09750 WP 001085462.1	VRLDVRGNTQIKGTG.DQKETN	VGKETKIKVVKNKVAPPFK	EAVVE	IMYGEGIS	KTGELL	LKIASDLD	IIKKA	GAWYSYKD	312	
NTDB id 499 SM12261 RS08315 WP 078228268.1	VRLDVRGSTQIKGTG.DQKDTN	VGKETKIKVVKNKVAPPFK	EAFVE	IMYGEGIS	KTGELL	LKIASDLD	IIKKA	GAWYSYKD	312	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	VRLDVRGSTQIKGTG.DQKDTN	VGKETKIKVVKNKVAPPFK	EAFVE	IMYGEGIS	KTGELL	LKIASDLD	IIKKA	GAWYSYKD	312	
NTDB id 1129469 STREPSUIS RS00385 WP 023369045.1	VRMDVRGNTQIKGTG.DKKDQN	VGKETKIKVVKNKVAPPFK	EAVVE	IMYGEGIS	RTEIGEL	IEIGSNLGI	IQKAGAWYSYNG	313		
NTDB id 408 SMU RS09530 WP 002262392.1	VRLDVRGNTQIKGTG.EQKDSN	IGKETKIKVVKNKVAPPFK	EAFVE	IIYGEIS	RTGELV	KIASDLDGI	IQKAGAWYSYNG	312		
NTDB id 453 Spy49 1753c ACI62003.1	VRLDVRGTTQIKGTG.DQKDS	SSIGKETKIKVVKNKVAPPFK	VAEVE	IMYGEGIS	RTEIGEL	VKIASDLD	IIKKA	GAWFSYNG	312	
NTDB id 625 LCA RS02525 WP 011374196.1	VRLEVRRAETIKNGT.....	DMIGNRARIKVVKNKVAPPFK	VAEVD	IMYGGIS	RTEIGEL	VDMAVEKD	IINKSGSWYSYGS	295		
NTDB id 115 BSU 16940 NP 389576.2	VRLEVRRAEQLKQGN.....	DVMGNKTKIKVVKNKVAPPFK	VAEVD	IMYGGIS	KEGETI	IDLGTELD	IVQKSGSWYSYEE	293		
NTDB id 1313 DR RS12030 WP 010888966.1	VRLDVRKIGQ....PTKVGND	AVANTVVIKTVKNKVA	APFKEVELAL	VYGGKGF	QDLSDL	VGLAADM	DIKKA	GSFYSYGD	308	
NTDB id 1245 Cj1673c YP 002345041.1	VRLDVRKVAT....L.KQNE	EPIGNRVKIKVVKNKVAPPFK	QAEFD	DMFGEL	SRREGEL	IDYGVKLD	IVDKSGAWFSYKD	295		
NTDB id 1211 C694 RS00795 WP 000963128.1	VRIDIRRIAS....L.KQNE	QHIGNRAKIKVVKNKVAPPFK	QAEFD	IMFGEGIS	KEGETI	IDYGVKLD	IVDKSGAWLSYQD	297		
NTDB id 1214 NCTC11637 00359 SQJ03206.1	VRIDIRRIAA....L.KQNE	QHIGNRAKIKVVKNKVAPPFK	QAEFD	IMFGEGIS	KEGETI	IDYGVKLD	IVDKSGAWLSYQD	297		
NTDB id 1334 RAOC RS04870 WP 004918236.1	VRIDIRRSLSDTGKIKDKS	GEVIGNRTKVIKVVKNKVAPPFK	SAEFD	IMYGGIS	VSKVGEI	LDVATDL	DIQKSGSWFSYQD	308		
NTDB id 1389 A4U84 RS07560 WP 021112712.1	VRLDIRRCGV....V.KDG	DEIIGSETKVIKVVKNKVAPPFK	REVQFD	IMYGGIS	SRMNEL	LILAEANG	FIKKSGAWFSYDG	311		
NTDB id 1130 NGFG RS03960 WP 003688695.1	VRLDIRRTGS....I.KKG	EEVLGNETRVKVIKKNKVAPPFK	QAEFD	ILYGGIS	SWEGEL	IDIGVKND	IINKSGAWYSYNG	295		
NTDB id 1124 NGFG RS03960 WP 003688695.1	VRLDIRRTGS....I.KKG	EEVLGNETRVKVIKKNKVAPPFK	QAEFD	ILYGGIS	SWEGEL	IDIGVKND	IINKSGAWYSYNG	295		
NTDB id 1123 OK783 RS03845 WP 003688695.1	VRLDIRRTGS....I.KKG	EEVLGNETRVKVIKKNKVAPPFK	QAEFD	ILYGGIS	SWEGEL	IDIGVKND	IINKSGAWYSYNG	295		
NTDB id 1427 RS RS02760 WP 011000510.1	VRLDIRRIGS....I.KKG	DEVVGNETKVIKVVKNKVAPPFK	QAEFD	ILYGGIS	VSRGEI	IDLGVEAK	VVEKSGAWYSYNG	303		
NTDB id 1165 A1552VC RS01565 WP 000344154.1	VRLDIRRTGA....I.KEG	EEVGNETRIKVVKNKIA	APFKEANTQ	IMYGGFN	REGEL	IDLGVKHK	MVEKSGAWYSYNG	294		
NTDB id 1142 GTF74 RS11550 WP 000344154.1	VRLDIRRTGA....I.KEG	EEVGNETRIKVVKNKIA	APFKEANTQ	IMYGGFN	REGEL	IDLGVKHK	MVEKSGAWYSYNG	294		
NTDB id 1074 ABD1 RS10195 WP 000344167.1	VRLDIRRIGQ....V.KEG	DEIVGSETKVIKVVKNKM	APPFKEAIFQ	ILYGGK	TNQLGEL	VDLAVQQ	DIVQKAGAWYSYQG	294		
NTDB id 1022 ACIAD RS06390 WP 004925639.1	VRLDIRRIGQ....V.KEG	DEIVGSETKVIKVVKNKM	APPFKEAIFQ	ILYGGK	VNQLGEL	VDLAVQQ	NIVQKAGAWYSYQG	294		
NTDB id 1205 PSJM300 05545 AFN77183.1	VRLDIRRTGA....V.KEG	DEVVGETRVKVVKNKVAPPFK	QAEFQ	ILYGGKI	YRNGE	IIDLG	VQQGLV	EKSGAWAYK	294	
consensus	!!**!*!	*	**	*****!*****!	*****	*****!*****	*****	**	***	! !*****!



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		EE	
NTDB id 600	KW2 RS01765 WP 011675413.1	..	387
NTDB id 269	KZH43 RS08665 WP 001085462.1	EE	388
NTDB id 228	SPD RS09265 WP 001085462.1	EE	388
NTDB id 194	SPR RS08825 WP 001085462.1	EE	388
NTDB id 159	SP RS09750 WP 001085462.1	EE	388
NTDB id 499	SM12261 RS08315 WP 078228268.1	EE	384
NTDB id 527	SMSK321 RS11065 WP 001085454.1	EE	384
NTDB id 1129469	STREPSUIS RS00385 WP 023369045.1	..	382
NTDB id 408	SMU RS09530 WP 002262392.1	..	383
NTDB id 453	Spy49 1753c ACI62003.1	..	378
NTDB id 625	LCA RS02525 WP 011374196.1	..	355
NTDB id 115	BSU 16940 NP 389576.2	..	348
NTDB id 1313	DR RS12030 WP 010888966.1	..	363
NTDB id 1245	Cj1673c YP 002345041.1	..	343
NTDB id 1211	C694 RS00795 WP 000963128.1	..	347
NTDB id 1214	NCTC11637 00359 SQJ03206.1	..	347
NTDB id 1334	RAOC RS04870 WP 004918236.1	..	343
NTDB id 1389	A4U84 RS07560 WP 021112712.1	..	372
NTDB id 1130	NGFG RS03960 WP 003688695.1	..	348
NTDB id 1124	NGFG RS03960 WP 003688695.1	..	348
NTDB id 1123	OK783 RS03845 WP 003688695.1	..	348
NTDB id 1427	RS RS02760 WP 011000510.1	..	352
NTDB id 1165	A1552VC RS01565 WP 000344154.1	..	354
NTDB id 1142	GTF74 RS11550 WP 000344154.1	..	354
NTDB id 1074	ABD1 RS10195 WP 000344167.1	..	349
NTDB id 1022	ACIAD RS06390 WP 004925639.1	..	349
NTDB id 1205	PSJM300 05545 AFN77183.1	..	347

consensus

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