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NTDB id 600 KW2 RS01765 WP 011675413.1	SVRLDVRGSTKIEEGS.GDNKTQI	GKIKTKVVK	NKVAPPF	KVALVDIMF	GEGISST	GELLNIA	VEEGTI	KKSGAW	FAYN	312			
NTDB id 269 KZH43 RS08665 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKE	TNMGKETK	KVVKNKVAPPF	KEAVVEIMY	GEGISKT	GELLKIAS	SDLDI	KKAGAW	YSYK	311			
NTDB id 228 SPD RS09265 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKE	TNMGKETK	KVVKNKVAPPF	KEAVVEIMY	GEGISKT	GELLKIAS	SDLDI	KKAGAW	YSYK	311			
NTDB id 194 SPR RS08825 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKE	TNMGKETK	KVVKNKVAPPF	KEAVVEIMY	GEGISKT	GELLKIAS	SDLDI	KKAGAW	YSYK	311			
NTDB id 159 SP RS09750 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKE	TNMGKETK	KVVKNKVAPPF	KEAVVEIMY	GEGISKT	GELLKIAS	SDLDI	KKAGAW	YSYK	311			
NTDB id 527 SMSK321 RS11065 WP 001085454.1	SVRLDVRGNTQIKGTG.DQKE	TNMGKETK	KVVKNKVAPPF	KEAVVEIMY	GEGISKT	GELLKIAS	SDLDI	KKAGAW	YSYK	311			
NTDB id 499 SM12261 RS08315 WP 078228268.1	SVRLDVRGNTQIKGTG.DQKE	TNMGKETK	KVVKNKVAPPF	KEAVVEIMY	GEGISKT	GELLKIAS	SDLDI	KKAGAW	YSYK	311			
NTDB id 453 Spy49 1753c ACI62003.1	SVRLDVRGTTQIKGTG.DQK	SSIGKETK	KVVKNKVAPPF	KVAEVEIMY	GEGISRT	GELVKIAS	SDLDI	TQKAGAW	FSYN	311			
NTDB id 408 SMU RS09530 WP 002262392.1	SVRLDVRGNTQIKGTG.EQK	SNIGKETK	KVVKNKVAPPF	KEAFVEIMY	GEGISRT	GELVKIAS	SDLGI	TQKAGAW	YSYN	311			
NTDB id 625 LCA RS02525 WP 011374196.1	TVRLEVRRAETIKNGT....	DMIGNRARI	KVVKNKVAPPF	KVAEVDIMY	GQGISRT	GELVDMAVE	KDI	INKSCS	WYSYG	294			
NTDB id 995157 AAVD42 RS20225 WP 003211102.1	SVRLEVRRAEQLKQGN....	DIMGNKTRI	KVVKNKVAPPF	FRIAEVDIMY	GEGISKE	GEIIDL	GSELDI	VQKSGAW	YSYQ	292			
NTDB id 115 BSU 16940 NP 389576.2	SVRLEVRRAEQLKQGN....	DVMGNKTKI	KVVKNKVAPPF	FRTAEVDIMY	GEGISKE	GEIIDL	GTELDI	VQKSGAW	YSYE	292			
NTDB id 1313 DR RS12030 WP 010888966.1	SVRLDVRKIGQ....	PTKVGNDAV	ANTVKT	IKTVKNKVA	APPFKEVELAL	VYCGK	GFDQLSD	LVGLAAD	MDI	KKACSF	YSYG	307	
NTDB id 1245 Cj1673c YP 002345041.1	SVRLDVRKIVAT....	L.KQNEEPI	GNRVK	KVVKNKVAPPF	FRQA	EFDVME	GEGLSR	EDELIDY	GVKLDI	VDKSGAW	FSYK	294	
NTDB id 1211 C694 RS00795 WP 000963128.1	SVRIDIRRIAS....	L.KQNEQHI	GNRAKA	KVVKNKVAPPF	FREA	EFDIMF	GEGISKE	GEI	IDYGVKLDI	VDKSGAW	LSYQ	296	
NTDB id 1214 NCTC11637 00359 SQJ03206.1	SVRIDIRRIAA....	L.KQNEQHI	GNRAKA	KVVKNKVAPPF	FREA	EFDIMF	GEGISKE	GEI	IDYGVKLDI	VDKSGAW	LSYQ	296	
NTDB id 1334 RA0C RS04870 WP 004918236.1	SVRIDIRRSLSDTGKIKDKS	GEVIGNRTK	VVVKNKVAPPF	KS	A	EFDIMY	GEGVSKV	GEILD	VATDLDI	TQKSGAW	FSYQ	307	
NTDB id 1389 A4U84 RS07560 WP 021112712.1	SVRLDIRRCGV....	V.KGDDEII	GSETK	VVVKNKVAPPF	PREV	QFDIMY	GEGISRM	NELLILA	EANGFI	KKSGAW	FSYD	310	
NTDB id 1130 NGFG RS03960 WP 003688695.1	SVRLDIRRTGS....	I.KKGE	EVLGNETR	VKVI	KNKVAPPF	RQA	EFDILY	GEGISWE	GELIDIG	VKNDI	INKSGAW	YSYN	294
NTDB id 1124 NGFG RS03960 WP 003688695.1	SVRLDIRRTGS....	I.KKGE	EVLGNETR	VKVI	KNKVAPPF	RQA	EFDILY	GEGISWE	GELIDIG	VKNDI	INKSGAW	YSYN	294
NTDB id 1123 OK783 RS03845 WP 003688695.1	SVRLDIRRTGS....	I.KKGE	EVLGNETR	VKVI	KNKVAPPF	RQA	EFDILY	GEGISWE	GELIDIG	VKNDI	INKSGAW	YSYN	294
NTDB id 1427 RS RS02760 WP 011000510.1	SVRLDIRRIGS....	I.KKGE	EVVGNETR	VVVKNKVAPPF	FREA	IFDILY	GACVSR	EDELIDL	GVEAKV	VEKSGAW	YSYN	302	
NTDB id 1165 A1552VC RS01565 WP 000344154.1	SVRLDIRRTGA....	I.KEGE	EVVGNETR	VVVKNK	IA	APPFKEANTQ	IMYCG	GFNR	EDELIDL	GVKHKM	VEKSGAW	YSYN	293
NTDB id 1142 GTF74 RS11550 WP 000344154.1	SVRLDIRRTGA....	I.KEGE	EVVGNETR	VVVKNK	IA	APPFKEANTQ	IMYCG	GFNR	EDELIDL	GVKHKM	VEKSGAW	YSYN	293
NTDB id 1074 ABD1 RS10195 WP 000344167.1	SVRLDIRRIGQ....	V.KEG	DEIVGSETK	VVVKNKM	APPFKEA	IFQILY	GKGTNQL	GELVDL	AVQQDI	VQKAGAW	YSYQ	293	
NTDB id 1022 ACIAD RS06390 WP 004925639.1	SVRLDIRRIGQ....	V.KEG	DEIVGSETK	VVVKNKM	APPFKEA	IFQILY	GKGTNQL	GELVDL	AVQQDI	VQKAGAW	YSYQ	293	
NTDB id 1205 PSJM300 05545 AFN77183.1	SVRLDIRRTGA....	V.KEG	EVVGNETR	VVVKNKVAPPF	RQA	EFDILY	GKGIY	ENGEI	IDLGV	QQGLVEK	SGAW	AYK	293
consensus	*!!**!*!	*	**	*****!***!!*!!*!!*!	*	*****!*	***	*****	***	***	! !****!		

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NTDB id 600 KW2 RS01765 WP 011675413.1	DEKIGGQA E KAKNYLKEHQDV F DEIDHKV R AAH G LDDSEVAETEETTASKTKAKAKKEEKAVETEEIELELED.....	387
NTDB id 269 KZH43 RS08665 WP 001085462.1	DEKIGGQ S ENAKKYLA E HP E IFDEIDKQV R SK F GIDGEEVSEQD T ENKKDE....PKKEEA..VNEEVPLDLGDELEIE	385
NTDB id 228 SPD RS09265 WP 001085462.1	DEKIGGQ S ENAKKYLA E HP E IFDEIDKQV R SK F GIDGEEVSEQD T ENKKDE....PKKEEA..VNEEVPLDLGDELEIE	385
NTDB id 194 SPR RS08825 WP 001085462.1	DEKIGGQ S ENAKKYLA E HP E IFDEIDKQV R SK F GIDGEEVSEQD T ENKKDE....PKKEEA..VNEEVPLDLGDELEIE	385
NTDB id 159 SP RS09750 WP 001085462.1	DEKIGGQ S ENAKKYLA E HP E IFDEIDKQV R SK F GIDGEEVSEQD T ENKKDE....PKKEEA..VNEEVPLDLGDELEIE	385
NTDB id 527 SMSK321 RS11065 WP 001085454.1	DEKIGGQ S ENAKKYLA D N P E F FA E IDH Q V R V Q F G LIDGEEAAE...SKKDE...VAQVDS..VNEEVTLDLGDELEIE	381
NTDB id 499 SM12261 RS08315 WP 078228268.1	DEKIGGQ S ENAKKYLA D N P E F FA E IDH Q V R V Q F G LIDGEEIAE...SKKDE...AAQVDS..VNEEVTLDLGDELEIE	381
NTDB id 453 Spy49 1753c ACI62003.1	GEKIGGQ S ENAKRYL A D H P Q L F DEIDR K V R V K F G LLEEESEESAMAVASE.....E.....TDDLALDLNGIEIE	377
NTDB id 408 SMU RS09530 WP 002262392.1	GEKIGGQ S ENAKK F L A D N P E I F D D I D H K V R V Q Y G LIEEDNTEEKQSSKEK.....ETDEK..ADKNLVLELDDTIELE	382
NTDB id 625 LCA RS02525 WP 011374196.1	SERIGGQ R ENAKNYL A D H E D V E D V R L K V R A A Y G ISDVPEEDLPTTED.EQIN.....ILPDDSTEE..	355
NTDB id 995157 AAVD42 RS20225 WP 003211102.1	EERIGGQ R ENAK Q F L K E N K D I L L M I Q E Q I R E H Y G LDTNGVKAAEEEEEGQEELE.....I.....	346
NTDB id 115 BSU 16940 NP 389576.2	EERIGGQ R ENAK Q F L K E N K D I M L M I Q E Q I R E H Y G LDTNNGVVQQQAEETQEELE.....FEE.....	348
NTDB id 1313 DR RS12030 WP 010888966.1	DERIGGQ K E K T I A Y I A E R P E M E Q E I R D R V M A A T R A G N A G E A P A L A P A P A A E A A E A.....	363
NTDB id 1245 Cj1673c YP 002345041.1	DKKIGGQ R ENAK A L L K E D K A L A D E I T L K I K E S I G SNEEI....MPLPDEP..LEEME.....	343
NTDB id 1211 C694 RS00795 WP 000963128.1	DKKIGGQ R ENAK A L L K E D K A L A D E I T L K I K E S I G SNEEI....MPLPDEP..LEEME.....	347
NTDB id 1214 NCTC11637 00359 SQJ03206.1	DKKIGGQ R ENAK A L L K E D K A L A D E I T L K I K E S I G SNEEI....MPLPDEP..LEEME.....	347
NTDB id 1334 RAOC RS04870 WP 004918236.1	DTKIGGQ R D T V K E L I K D N P E I A E L E A K I R E K L Q A K.....	343
NTDB id 1389 A4U84 RS07560 WP 021112712.1	GTKIGGQ K N N A V K V L K E N P E I A D K L E Q E I R N T L A S N P N S....VLKATASDSNDESD..VEEFSEEL.....	372
NTDB id 1130 NGFG RS03960 WP 003688695.1	GAKIGGQ K D N V R V V L K E N P E I S D E I D A K I R A L N C V E M H I....TEGTQDETD.....GERPEE.....	348
NTDB id 1124 NGFG RS03960 WP 003688695.1	GAKIGGQ K D N V R V V L K E N P E I S D E I D A K I R A L N C V E M H I....TEGTQDETD.....GERPEE.....	348
NTDB id 1123 OK783 RS03845 WP 003688695.1	GAKIGGQ K D N V R V V L K E N P E I S D E I D A K I R A L N C V E M H I....TEGTQDETD.....GERPEE.....	348
NTDB id 1427 RS RS02760 WP 011000510.1	GERIGGQ R D N C R E F L R E N A E L A R E I N K V R E H L C V T P M GAV.TLAEEVEED.....	352
NTDB id 1165 A1552VC RS01565 WP 000344154.1	GDKIGGQ K A N A C K Y L K E N P E I A K T L D K K L R E M L L N P E N M....QLIAETSSAADDVE..FGAVPEEF.....	354
NTDB id 1142 GTF74 RS11550 WP 000344154.1	GDKIGGQ K A N A C K Y L K E N P E I A K T L D K K L R E M L L N P E N M....QLIAETSSAADDVE..FGAVPEEF.....	354
NTDB id 1074 ABD1 RS10195 WP 000344167.1	GNKIGGQ K N N V I R Y F E E N N C I A E I E R N I R E Q L L T T G T NGAVQ.I.EDEEEDPD...LLES.....	349
NTDB id 1022 ACIAD RS06390 WP 004925639.1	GNKIGGQ K N N V I R Y L E E N P C I S T E I E A V I R E Q L L T K A S D....QTAA.HDETEEEDPD...LLES.....	349
NTDB id 1205 PSJM300 05545 AFN77183.1	GSKIGGQ K A N A A K Y L E E N P E I G Q E I Q I R A K L L V T S A N....TKATPVAEDLADAD...I.....	347
consensus	**!!!** ** * ** * ** * ** * ** *	

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NTDB id 600 KW2 RS01765 WP 011675413.1 ... 387
NTDB id 269 KZH43 RS08665 WP 001085462.1 IEE 388
NTDB id 228 SPD RS09265 WP 001085462.1 IEE 388
NTDB id 194 SPR RS08825 WP 001085462.1 IEE 388
NTDB id 159 SP RS09750 WP 001085462.1 IEE 388
NTDB id 527 SMSK321 RS11065 WP 001085454.1 IEE 384
NTDB id 499 SM12261 RS08315 WP 078228268.1 IEE 384
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consensus
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 ≥ 50% conserved