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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 527 SMSK321 RS11065 WP 001085454.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 453 Spy49 1753c ACI62003.1
NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 115 BSU 16940 NP 389576.2
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 1313 DR RS12030 WP 010888966.1
NTDB id 1245 Cj1673c YP 002345041.1
NTDB id 1214 NCTC11637 00359 SQJ03206.1
NTDB id 1211 C694 RS00795 WP 000963128.1
NTDB id 1334 RAOC RS04870 WP 004918236.1
NTDB id 1389 A4U84 RS07560 WP 021112712.1
NTDB id 1130 NGFG RS03960 WP 003688695.1
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NTDB id 1123 OK783 RS03845 WP 003688695.1
NTDB id 1427 RS RS02760 WP 011000510.1
NTDB id 1165 A1552VC RS01565 WP 000344154.1
NTDB id 1142 GTF74 RS11550 WP 000344154.1
NTDB id 355330 E5D09 RS17735 WP 000344167.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus



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NTDB id 1123 OK783 RS03845 WP 003688695.1
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NTDB id 355330 E5D09 RS17735 WP 000344167.1
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NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

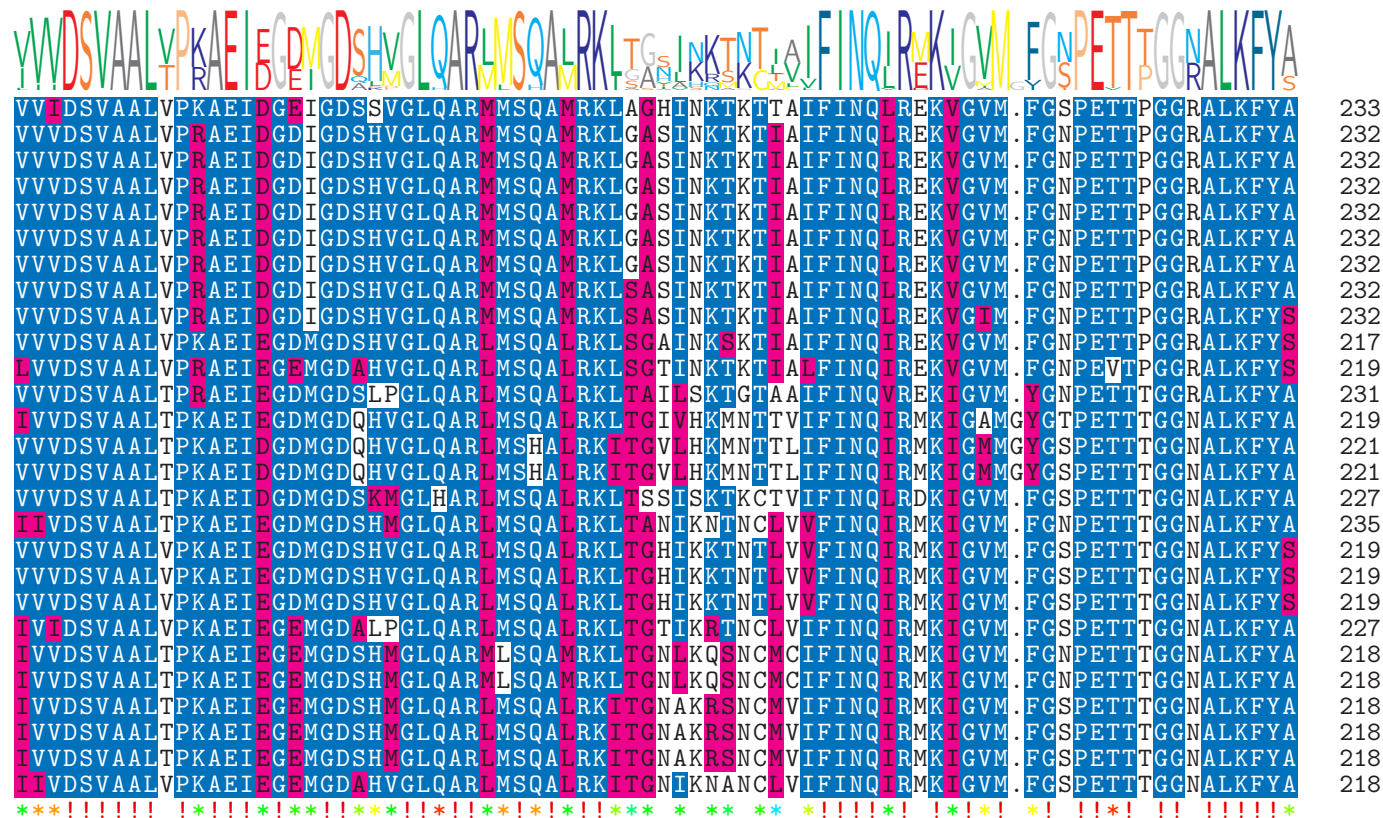
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NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

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NTDB id 600 KW2 RS01765 WP 011675413.1	SVRLDVRG	STKIEEGS	.GDNKTQ	IGKITK	IKVVKNKVAPPF	KVALV	DIMF	GEGIS	STGEL	INTA	VEEG	IT	KKSG	AWFAYN	312							
NTDB id 269 KZH43 RS08665 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKVAPPF	KEAVV	EIMY	GEGISK	TGELL	KIAS	DLDI	IKK	AGAW	YSYK	311							
NTDB id 228 SPD RS09265 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKVAPPF	KEAVV	EIMY	GEGISK	TGELL	KIAS	DLDI	IKK	AGAW	YSYK	311							
NTDB id 194 SPR RS08825 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKVAPPF	KEAVV	EIMY	GEGISK	TGELL	KIAS	DLDI	IKK	AGAW	YSYK	311							
NTDB id 159 SP RS09750 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKVAPPF	KEAVV	EIMY	GEGISK	TGELL	KIAS	DLDI	IKK	AGAW	YSYK	311							
NTDB id 527 SMSK321 RS11065 WP 001085454.1	SVRLDVRG	STQIKGTG	.DQKDTN	VGKETK	IKVVKNKVAPPF	KEAFV	EIMY	GEGISK	TGELL	KIAS	DLDI	IKK	AGAW	YSYK	311							
NTDB id 499 SM12261 RS08315 WP 078228268.1	SVRLDVRG	STQIKGTG	.DQKDTN	VGKETK	IKVVKNKVAPPF	KEAFV	EIMY	GEGISK	TGELL	KIAS	DLDI	IKK	AGAW	YSYK	311							
NTDB id 453 Spy49 1753c ACI62003.1	SVRLDVRG	TQTQIKGTG	.DQKDS	IGKETK	IKVVKNKVAPPF	KVAEV	EIMY	GEGISRT	GELV	KIAS	DLDI	IKK	AGAW	FSYN	311							
NTDB id 408 SMU RS09530 WP 002262392.1	SVRLDVRG	NTQIKGTG	.EQKDSN	IGKETK	IKVVKNKVAPPF	KEAFV	EIIY	GEGISRT	GELV	KIAS	DLGI	IKK	AGAW	YSYN	311							
NTDB id 115 BSU 16940 NP 389576.2	SVRLEVRRA	AEQLKQGN		DVMGN	KT	IKVVKNKVAPPF	RTAEV	DIMY	GEGIS	KEGE	IIDL	GT	ELDIV	QKSG	SWYSYE	292						
NTDB id 625 LCA RS02525 WP 011374196.1	TVRLEVRRA	ETIKNGT		DMIGN	RARI	IKVVKNKVAPPF	KVAEV	DIMY	QG	ISRT	GELV	DM	AVEK	DI	INKSG	SWYSYG	294					
NTDB id 1313 DR RS12030 WP 010888966.1	SVRLDVRK	IGQ....	PTKVG	ND	AVANT	VKI	IKTV	KNKVA	APFKE	VELA	LVY	GKGF	DQLS	DLV	G	LAAD	MDIT	IKKAG	SFFYSYG	307		
NTDB id 1245 Cj1673c YP 002345041.1	SVRLDVRK	VAT....	L.KQNE	EEP	IGNRV	KV	KNKVAPPF	RQAEF	DVMF	GEG	LS	REGEL	IDY	GV	KLDI	VDK	SGAW	FSYK	294			
NTDB id 1214 NCTC11637 00359 SQJ03206.1	SVRIDIRRI	AA....	L.KQNE	EQH	IGNRA	KA	KNKVAPPF	REAEF	DIMF	GEGIS	KEGE	IIDY	GV	KLDI	VDK	SGAW	LSYQ	296				
NTDB id 1211 C694 RS00795 WP 000963128.1	SVRIDIRRI	AS....	L.KQNE	EQH	IGNRA	KA	KNKVAPPF	REAEF	DIMF	GEGIS	KEGE	IIDY	GV	KLDI	VDK	SGAW	LSYQ	296				
NTDB id 1334 RAOC RS04870 WP 004918236.1	SVRIDIRRS	LSDTG	KIKDKS	GEV	IGNRT	KV	KNKVAPPF	KS	AEFD	IMYG	GEGV	SKV	GE	ILDV	AT	DLDI	IQK	SGSW	FSYQ	307		
NTDB id 1389 A4U84 RS07560 WP 021112712.1	SVRLDIRR	CGV....	V.KDG	DEI	IGSE	TKV	KNKVAPPF	REV	QFD	IMY	GEGIS	RM	NELL	IL	AE	ANGF	IT	KKSG	AWFSYD	310		
NTDB id 1130 NGFG RS03960 WP 003688695.1	SVRLDIRR	TGS....	I.KKG	EEV	LGNET	RV	KV	KNKVAPPF	RQAEF	DILY	GEGIS	WE	GELID	IG	V	KNDI	INK	SGAW	YSYN	294		
NTDB id 1124 NGFG RS03960 WP 003688695.1	SVRLDIRR	TGS....	I.KKG	EEV	LGNET	RV	KV	KNKVAPPF	RQAEF	DILY	GEGIS	WE	GELID	IG	V	KNDI	INK	SGAW	YSYN	294		
NTDB id 1123 OK783 RS03845 WP 003688695.1	SVRLDIRR	TGS....	I.KKG	EEV	LGNET	RV	KV	KNKVAPPF	RQAEF	DILY	GEGIS	WE	GELID	IG	V	KNDI	INK	SGAW	YSYN	294		
NTDB id 1427 RS RS02760 WP 011000510.1	SVRLDIRR	IGS....	I.KKG	DEV	VGNET	KV	KNKVAPPF	RE	AI	F	DILY	GAGV	S	REGE	IIDL	G	VEAK	VVEK	SGAW	YSYN	302	
NTDB id 1165 A1552VC RS01565 WP 000344154.1	SVRLDIRR	TGA....	I.KEG	EEV	VGNET	RI	KNKV	IA	APFKE	ANTQ	IMY	QG	FN	REGEL	IDL	G	V	KKH	MVEK	SGAW	YSYN	293
NTDB id 1142 GTF74 RS11550 WP 000344154.1	SVRLDIRR	TGA....	I.KEG	EEV	VGNET	RI	KNKV	IA	APFKE	ANTQ	IMY	QG	FN	REGEL	IDL	G	V	KKH	MVEK	SGAW	YSYN	293
NTDB id 355330 E5D09 RS17735 WP 000344167.1	SVRLDIRR	IGQ....	V.KEG	DEI	VGS	ETKV	KNK	M	APPFKE	AI	FQILY	GKGT	N	QLGEL	V	D	LAV	Q	QDIV	QKAG	AWYSYQ	293
NTDB id 1074 ABD1 RS10195 WP 000344167.1	SVRLDIRR	IGQ....	V.KEG	DEI	VGS	ETKV	KNK	M	APPFKE	AI	FQILY	GKGT	N	QLGEL	V	D	LAV	Q	QDIV	QKAG	AWYSYQ	293
NTDB id 1022 ACIAD RS06390 WP 004925639.1	SVRLDIRR	IGQ....	V.KEG	DEI	IGSE	TKV	KNK	M	APPFRE	AI	FQILY	GKGV	N	QLGEL	V	D	LAV	Q	QDIV	QKAG	AWYSYQ	293
NTDB id 1205 PSJM300 05545 AFN77183.1	SVRLDIRR	TGA....	V.KEG	DEV	VGS	ETRV	KNKV	APPF	RQAEF	QILY	GKGI	YRN	GE	IIDL	G	V	Q	QGLV	EK	SGAW	AYK	293
consensus	*!!***!* * ** *****!*****!*****!***** *****!***** ***** *															*** ! !*****!						

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NTDB id 600 KW2 RS01765 WP 011675413.1	DEKIGQGA	EKAKNYLKEHQDV	DEIDHKVRAAHG	LDDSEVAETEEE	TTASKTK	..AKAKKEEKAVETEEIELELED..	387
NTDB id 269 KZH43 RS08665 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	LIDGEEVSEQDTE	NKKDE	PKKEEA..VNEEVPLDLGDEL	382
NTDB id 228 SPD RS09265 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	LIDGEEVSEQDTE	NKKDE	PKKEEA..VNEEVPLDLGDEL	382
NTDB id 194 SPR RS08825 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	LIDGEEVSEQDTE	NKKDE	PKKEEA..VNEEVPLDLGDEL	382
NTDB id 159 SP RS09750 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	LIDGEEVSEQDTE	NKKDE	PKKEEA..VNEEVPLDLGDEL	382
NTDB id 527 SMSK321 RS11065 WP 001085454.1	DEKIGQGS	ENAKKYLAADNPEV	FAEIDHQVRVQFGL	LIDGEEAAE	SKKDE	VAQVDS..VNEEVTLDLGDEL	378
NTDB id 499 SM12261 RS08315 WP 078228268.1	DEKIGQGS	ENAKKYLAADNPEIF	DEIDHQVRVQFGL	LIDGEEIAE	SKKDE	AAQVDS..VNEEVTLDLGDEL	378
NTDB id 453 Spy49 1753c ACI62003.1	GEKIGQGS	ENAKRYLADHPQLF	DEIDRKVRVKFGL	LEESEEEESAMAV	ASE	E.....TDDLALDLNGI	374
NTDB id 408 SMU RS09530 WP 002262392.1	GEKIGQGS	ENAKKFLADNPEIF	DDIDHKVRVQYGL	IEEDNTEEKQSS	KEK	ETDEK..ADKNLVLELDDTI	379
NTDB id 115 BSU 16940 NP 389576.2	EERLGQGR	ENAKQFLKENKDIM	LMIQEQIREHYGL	DNNGVVQQAAEE	TQEEL	E..FE.E.....	348
NTDB id 625 LCA RS02525 WP 011374196.1	SERIGQGR	ENAKNYLADHEDVE	DEVRLKVRVQYGL	ISDVPEEDLP	TTE	DE.QI.N..ILPDDST.....EE	355
NTDB id 1313 DR RS12030 WP 010888966.1	DERIGQGK	EKTIAIYIAERPE	MEQEIRDRVMAA	IRAGNAGEAPAL	A	PAPAAPEAAEA.....	363
NTDB id 1245 Cj1673c YP 002345041.1	DKKLGGGR	ENSKAFLKENPEI	ADEITKAIQNSMG	IEGMISGS	..EDDEGE	..E.....	343
NTDB id 1214 NCTC11637 00359 SQJ03206.1	DKKLGGGR	ENAKALLKEDKAL	ADEITLKI	KESIGSNEEIMPL	..PDEPLE	..EME.....	347
NTDB id 1211 C694 RS00795 WP 000963128.1	DKKLGGGR	ENAKALLKEDKAL	ADEITLKI	KESIGSNEEIMPL	..PDEPLE	..EME.....	347
NTDB id 1334 RAOC RS04870 WP 004918236.1	DTKLGGGR	DTVTKELIKDNPE	LAELEAKIREKL	QAK			343
NTDB id 1389 A4U84 RS07560 WP 021112712.1	GTKIGQGG	KNNAVKWLKENPEI	ADKLEQEIRNTL	ASNPNSVLK	..ATASDSND	ESDVVEEFSE.....EEL	372
NTDB id 1130 NGFG RS03960 WP 003688695.1	GAKIGQGG	KDNVRVWLKENPEIS	DEIDAKIRALNG	VEMHITEG	..TQDET	D.....GERPE.....E	348
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NTDB id 1165 A1552VC RS01565 WP 000344154.1	GDKIGQGG	KANACKYLKENPEI	AKTLDKKLREML	LNPNMQLI	..AETSSAAD	DVEFGAVPE.....EF	354
NTDB id 1142 GTF74 RS11550 WP 000344154.1	GDKIGQGG	KANACKYLKENPEI	AKTLDKKLREML	LNPNMQLI	..AETSSAAD	DVEFGAVPE.....EF	354
NTDB id 355330 E5D09 RS17735 WP 000344167.1	GNKIGQGG	KNNVIRYFEENN	QIAEEIERNIREQ	LLTTGTNGAV	..Q.I.EDEE	EPD..LLE.....S	349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	GNKIGQGG	KNNVIRYFEENN	QIAEEIERNIREQ	LLTTGTNGAV	..Q.I.EDEE	EPD..LLE.....S	349
NTDB id 1022 ACIAD RS06390 WP 004925639.1	GNKIGQGG	KNNVIRYLEENP	QISTEIEAVIREQ	LLTKASDQTA	..A.HDETEE	EPD..LLES.....	349
NTDB id 1205 PSJM300 05545 AFN77183.1	GSKIGQGG	KANAAYYLEENPEI	IGQIEEQIRAKLL	VTSANTKA	..TPVAEDLAD	AD..I.....	347
consensus	***!!!	*****	**	*****	*****	**	*

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NTDB id 600 KW2 RS01765 WP 011675413.1			387
NTDB id 269 KZH43 RS08665 WP 001085462.1	EIEIEE		388
NTDB id 228 SPD RS09265 WP 001085462.1	EIEIEE		388
NTDB id 194 SPR RS08825 WP 001085462.1	EIEIEE		388
NTDB id 159 SP RS09750 WP 001085462.1	EIEIEE		388
NTDB id 527 SMSK321 RS11065 WP 001085454.1	EIEIEE		384
NTDB id 499 SM12261 RS08315 WP 078228268.1	EIEIEE		384
NTDB id 453 Spy49 1753c ACI62003.1	EIED..		378
NTDB id 408 SMU RS09530 WP 002262392.1	ELED..		383
NTDB id 115 BSU 16940 NP 389576.2			348
NTDB id 625 LCA RS02525 WP 011374196.1			355
NTDB id 1313 DR RS12030 WP 010888966.1			363
NTDB id 1245 Cj1673c YP 002345041.1			343
NTDB id 1214 NCTC11637 00359 SQJ03206.1			347
NTDB id 1211 C694 RS00795 WP 000963128.1			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
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NTDB id 1165 A1552VC RS01565 WP 000344154.1			354
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NTDB id 1022 ACIAD RS06390 WP 004925639.1			349
NTDB id 1205 PSJM300 05545 AFN77183.1			347
consensus			

-  non conserved
-  similar
-  ≥ 50% conserved