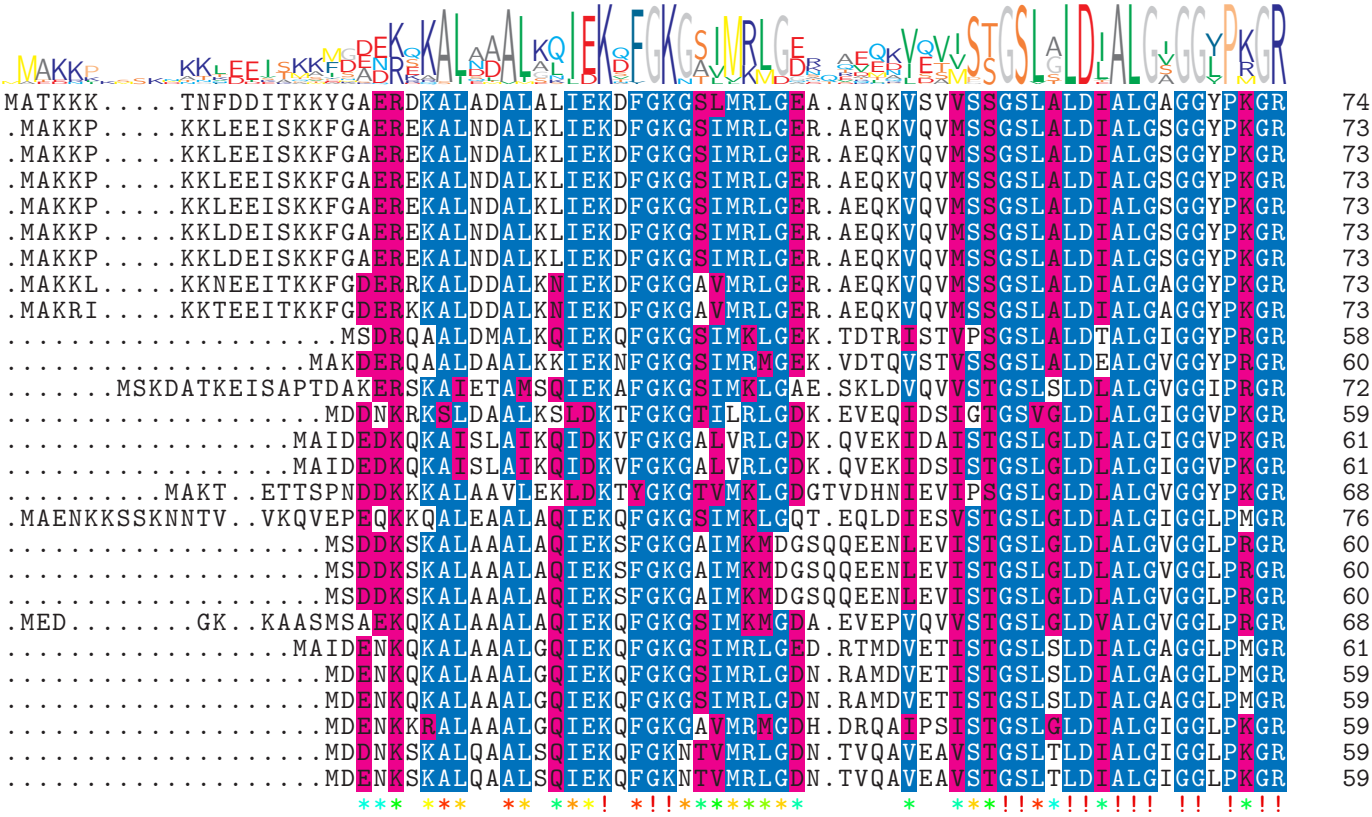


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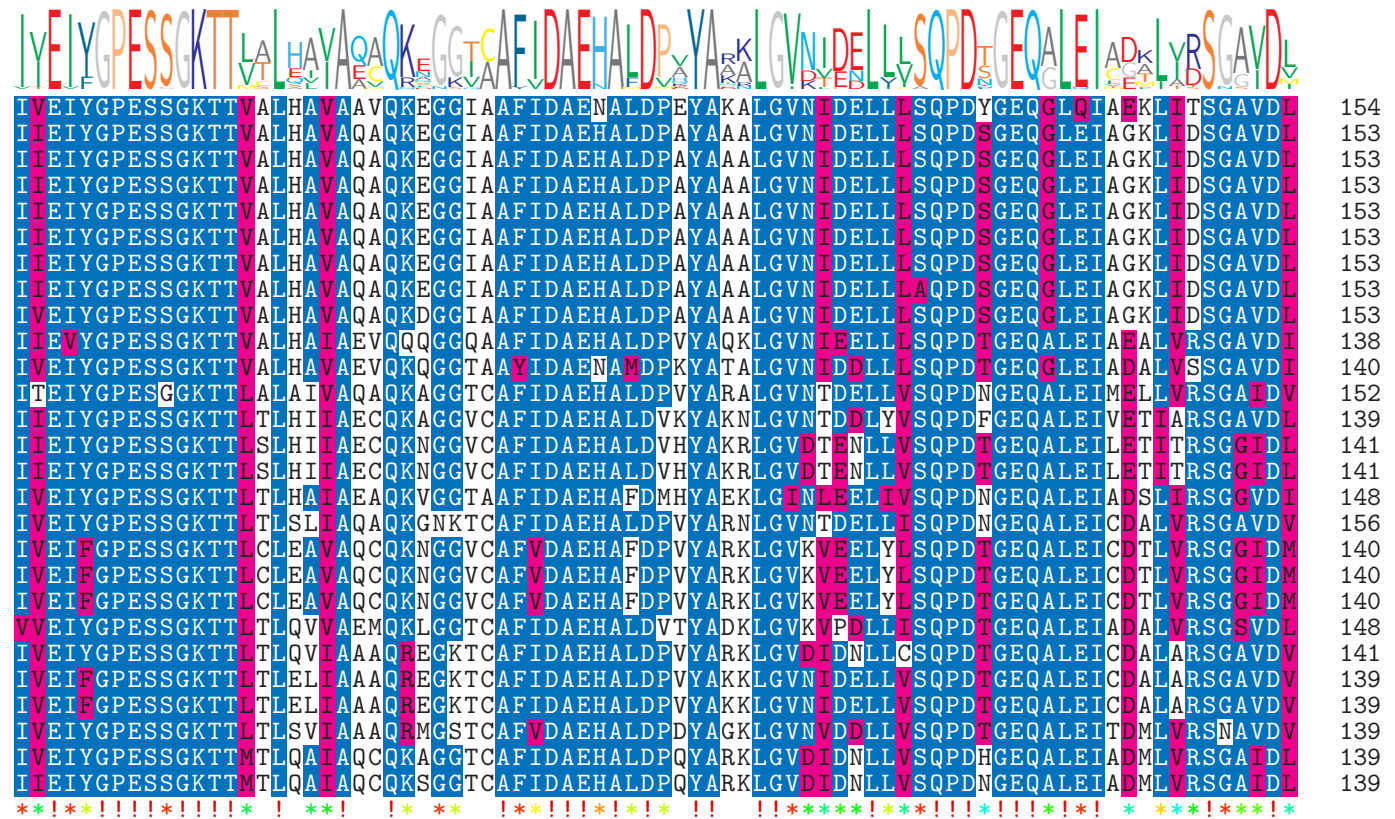
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NTDB id 159 SP RS09750 WP 001085462.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 453 Spy49 1753c ACI62003.1
NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 115 BSU 16940 NP 389576.2
NTDB id 625 LCA 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
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NTDB id 1123 OK783 RS03845 WP 003688695.1
NTDB id 1427 RS RS02760 WP 011000510.1
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NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus



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NTDB id 600 KW2 RS01765 WP 011675413.1
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consensus

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NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus



NTDB	id	600	KW2	RS01765	WP	011675413.1	SVRLDVRG	STKIEEGS	.GDNKTQ	QKIKTK	IKVVKNKV	VAPPFK	VALVD	IMF	GEGIS	STGEL	LNIAVEEG	TIKKS	GAWFAYN	312																	
NTDB	id	269	KZH43	RS08665	WP	001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKV	VAPPFK	EA	VVE	IMY	GEGIS	KTGEL	LKIAS	DLDI	IKKAGAW	SYK	311															
NTDB	id	228	SPD	RS09265	WP	001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKV	VAPPFK	EA	VVE	IMY	GEGIS	KTGEL	LKIAS	DLDI	IKKAGAW	SYK	311															
NTDB	id	194	SPR	RS08825	WP	001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKV	VAPPFK	EA	VVE	IMY	GEGIS	KTGEL	LKIAS	DLDI	IKKAGAW	SYK	311															
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NTDB	id	453	Spy49	1753c	ACI62003.1	SVRLDVRG	TTQIKGTG	.DQKDS	SI	GKETK	IKVVKNKV	VAPPFK	V	AE	VE	IMY	GEGIS	RTGEL	VKIAS	DLDI	IQKAGAW	FSYN	311														
NTDB	id	408	SMU	RS09530	WP	002262392.1	SVRLDVRG	NTQIKGTG	.EQKDS	NI	GKETK	IKVVKNKV	VAPPFK	EA	FVE	IIY	GEGIS	RTGEL	VKIAS	DLDI	IQKAGAW	SYN	311														
NTDB	id	115	BSU	16940	NP	389576.2	SVRLDVR	RAEQLKQGN	DVM	G	KNKTK	IKVVKNKV	VAPPFK	RT	AE	VD	IMY	GEGIS	KEGEL	ID	LGTEL	DI	VQKSG	SWYSY	292												
NTDB	id	625	LCA	RS02525	WP	0011374196.1	TVRLDVR	RAETIKNGT	DM	IGN	RA	IKVVKNKV	VAPPFK	V	AE	VD	IMY	GQGIS	RTGEL	VDMA	VEKDI	INKSG	SWYSY	294													
NTDB	id	1313	DR	RS12030	WP	010888966.1	SVRLDVR	KIGQ	PTK	VGNDA	VANTV	KIK	TVKNKVA	A	PFKE	VELAL	LVY	GKGF	DQLSD	LVGL	LAADM	DI	IKKAG	SFYSY	307												
NTDB	id	1245	Cj1673c	YP	002345041.1	SVRLDVR	KVAT	L	KQNE	EPI	GNRV	KV	IKVVKNKV	VAPPFR	Q	AE	F	D	VMF	GEGLS	R	EGEL	IDY	GVKL	DI	V	D	K	S	GAWF	SYK	294					
NTDB	id	1214	NCTC11637	00359	SQJ03206.1	SVRLDVR	RIIAA	L	KQNE	QHI	GNRA	K	IKVVKNKV	VAPPFR	E	AE	F	D	IMF	GEGIS	KEGE	I	IDY	GVKL	DI	V	D	K	S	GAWL	SYQ	296					
NTDB	id	1211	C694	RS00795	WP	000963128.1	SVRLDVR	RIIAS	L	KQNE	QHI	GNRA	K	IKVVKNKV	VAPPFR	E	AE	F	D	IMF	GEGIS	KEGE	I	IDY	GVKL	DI	V	D	K	S	GAWL	SYQ	296				
NTDB	id	1334	RAOC	RS04870	WP	004918236.1	SVRLDVR	RLSLD	STGKIKDS	GEV	IGNR	TKV	IKVVKNKV	VAPPFR	E	AE	F	D	IMY	GEGV	SKV	GEIL	VAT	DL	DI	I	Q	K	S	G	W	F	SY	307			
NTDB	id	1389	A4U84	RS07560	WP	021112712.1	SVRLDVR	RRCGV	V	KDGE	DEI	IG	SETK	V	IKVVKNKV	VAPPFR	REV	Q	F	D	IMY	GEGIS	RMNELL	L	IAE	ANG	F	IK	K	S	GAWF	SYD	310				
NTDB	id	1130	NGFG	RS03960	WP	003688695.1	SVRLDVR	RTGS	I	KKGE	EV	LGNET	R	V	KV	I	KNKV	VAPPFR	Q	AE	F	D	ILY	GEGIS	WE	GEL	ID	I	GVKN	DI	I	N	K	S	GAW	SYN	294
NTDB	id	1124	NGFG	RS03960	WP	003688695.1	SVRLDVR	RTGS	I	KKGE	EV	LGNET	R	V	KV	I	KNKV	VAPPFR	Q	AE	F	D	ILY	GEGIS	WE	GEL	ID	I	GVKN	DI	I	N	K	S	GAW	SYN	294
NTDB	id	1123																																			

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NTDB id 600 KW2 RS01765 WP 011675413.1	DEKIGQGA	EKAKNYLKEHQDV	DEIDHKVRAAHG	LDDSEVAETEEETT	ASKTKAKAKKEEKAVETEEIELELED	387
NTDB id 269 KZH43 RS08665 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTENKKDE	...PKKEEA..VNEEVPLDLGDELEIE	385
NTDB id 228 SPD RS09265 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTENKKDE	...PKKEEA..VNEEVPLDLGDELEIE	385
NTDB id 194 SPR RS08825 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTENKKDE	...PKKEEA..VNEEVPLDLGDELEIE	385
NTDB id 159 SP RS09750 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTENKKDE	...PKKEEA..VNEEVPLDLGDELEIE	385
NTDB id 527 SMSK321 RS11065 WP 001085454.1	DEKIGQGS	ENAKKYLADNPEVFAE	IDHQVRVQFGL	IDGEEAAE	...SKKDE...VAQVDS..VNEEVTLDLGDELEIE	381
NTDB id 499 SM12261 RS08315 WP 078228268.1	DEKIGQGS	ENAKKYLADNPEIF	DEIDHQVRVQFGL	IDGEEIAE	...SKKDE...AAQVDS..VNEEVTLDLGDELEIE	381
NTDB id 453 Spy49 1753c ACI62003.1	GEKIGQGS	ENAKRYLADHPQLF	DEIDRKVRVKFGL	LEESEEEESAMAVASE	E.....TDDLALDLNNGIEIE	377
NTDB id 408 SMU RS09530 WP 002262392.1	GEKIGQGS	ENAKKFLADNPEIF	DDIDHKVRVQYGL	IEEDNTEEEKSSKEK	ETDEK..ADKNLVLELDDTIELE	382
NTDB id 115 BSU 16940 NP 389576.2	EERLGGG	RENAKQFLKENKDIMLMIQE	QIREHYGL	DNNGVVQQAEETQEEL	EFEE.....	348
NTDB id 625 LCA RS02525 WP 011374196.1	SERIGQG	RENAKNYLADHEDVE	DEVRLKVRVQYGL	ISDVPEEDLPTTEDE	.QI.NILPDDST.....EE.....	355
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NTDB id 1245 Cj1673c YP 002345041.1	DKKLGGG	RENSKAFLENPEIADEITKAIQNSMG	IEGMISGSEDDE	.GE.E.....		343
NTDB id 1214 NCTC11637 00359 SQJ03206.1	DKKLGGG	RENAKALLKEDKALADEITLKI	KESIGSNEEIMPLPDEP	.LE.EME.....		347
NTDB id 1211 C694 RS00795 WP 000963128.1	DKKLGGG	RENAKALLKEDKALADEITLKI	KESIGSNEEIMPLPDEP	.LE.EME.....		347
NTDB id 1334 RAOC RS04870 WP 004918236.1	DTKLGGG	RDITVKELIKDNPELAEELEAKI	IREKLQAK			343
NTDB id 1389 A4U84 RS07560 WP 021112712.1	GTKIGQG	KNNAVKWLKENPEIADKLEQE	IRNTLASNPNSVLKATAS	.D...SNDES	DVEEFSEEE..L.....	372
NTDB id 1130 NGFG RS03960 WP 003688695.1	GAKIGQG	KDNVRVWLKENPEISDEIDAKI	RALNGVEMHITEGTQDE	.TD.....	GERPEE.....	348
NTDB id 1124 NGFG RS03960 WP 003688695.1	GAKIGQG	KDNVRVWLKENPEISDEIDAKI	RALNGVEMHITEGTQDE	.TD.....	GERPEE.....	348
NTDB id 1123 OK783 RS03845 WP 003688695.1	GAKIGQG	KDNVRVWLKENPEISDEIDAKI	RALNGVEMHITEGTQDE	.TD.....	GERPEE.....	348
NTDB id 1427 RS RS02760 WP 011000510.1	GERIGQG	RDNCREFLRENAELAREIENKVR	REHLGVTPMGAVTLAEE	.VE.ED.....		352
NTDB id 253739 CTI54 RS06255 WP 002914769.1	GDKIGQG	KANAITWLKENPAAAKEIEKKV	RELLLNQDAKPD	.FV..VD.GNDAEETE	QDF.....	352
NTDB id 1165 A1552VC RS01565 WP 000344154.1	GDKIGQG	KANACKYLLKENPEIAKTL	DKKLREMLLNPENMQLI	.AE.....	TSSAADDVEFGAVPEEF.....	354
NTDB id 1142 GTF74 RS11550 WP 000344154.1	GDKIGQG	KANACKYLLKENPEIAKTL	DKKLREMLLNPENMQLI	.AE.....	TSSAADDVEFGAVPEEF.....	354
NTDB id 1205 PSJM300 05545 AFN77183.1	GSKIGQG	KANAAYLEENPEIGQIEEQ	IRAKLLVTSANTKA	.TP..VA.EDLADADI		347
NTDB id 1022 ACIAD RS06390 WP 004925639.1	GNKIGQG	KNNVIRYLEENPQISTEIEAV	IREQLLT	TKASDQTA	.A...HD.ETEEEPDLLES	349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	GNKIGQG	KNNVIRYFEENNQIAEEIERN	IREQLLT	TGTNGAV	.Q...I..EDEEEDLLLES	349
consensus	**!!!!***** ** ***** ***** ** *					

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		IEE	
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
NTDB id 453 Spy49 1753c ACI62003.1	D..		378
NTDB id 408 SMU RS09530 WP 002262392.1	D..		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
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NTDB id 1022 ACIAD RS06390 WP 004925639.1	...		349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	...		349
consensus			

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