

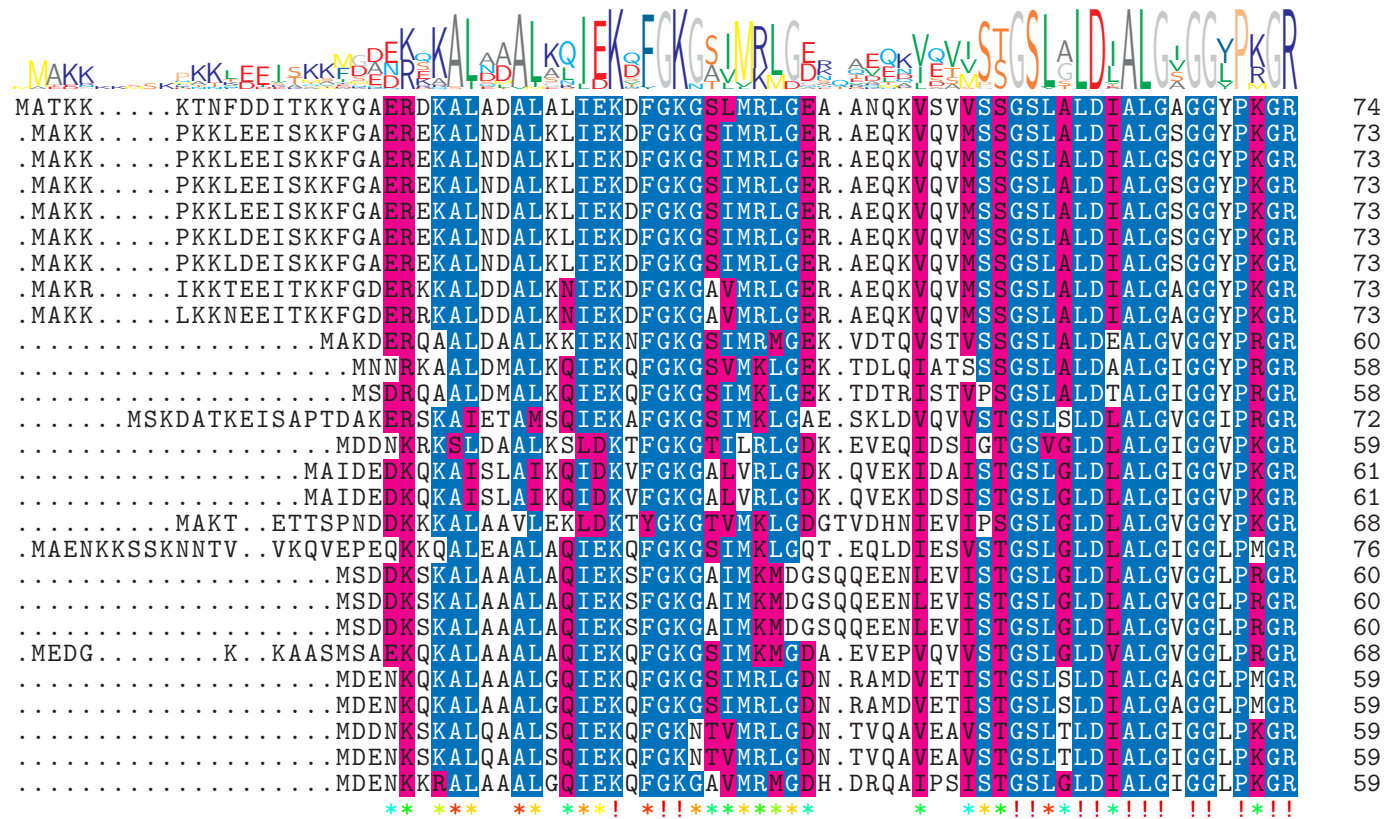
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NTDB id 269 KZH43 RS08665 WP 001085462.1
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NTDB id 194 SPR RS08825 WP 001085462.1
NTDB id 159 SP RS09750 WP 001085462.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 453 Spy49 1753c ACI62003.1
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 176265 SporoP33 RS14690 WP 081244423.1
NTDB id 115 BSU 16940 NP 389576.2
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NTDB id 1124 NGFG RS03960 WP 003688695.1
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
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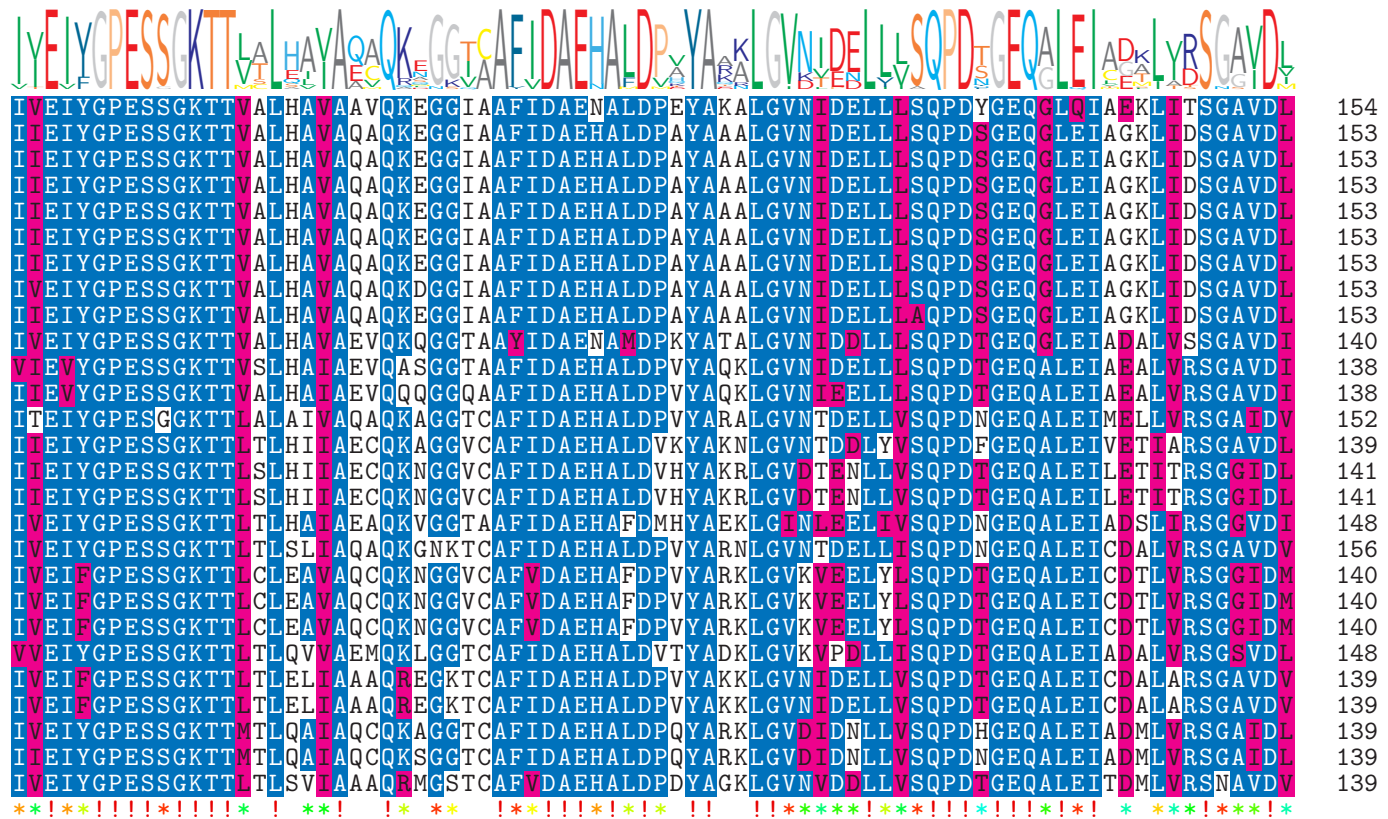
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NTDB id 1165 A1552VC RS01565 WP 000344154.1
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consensus

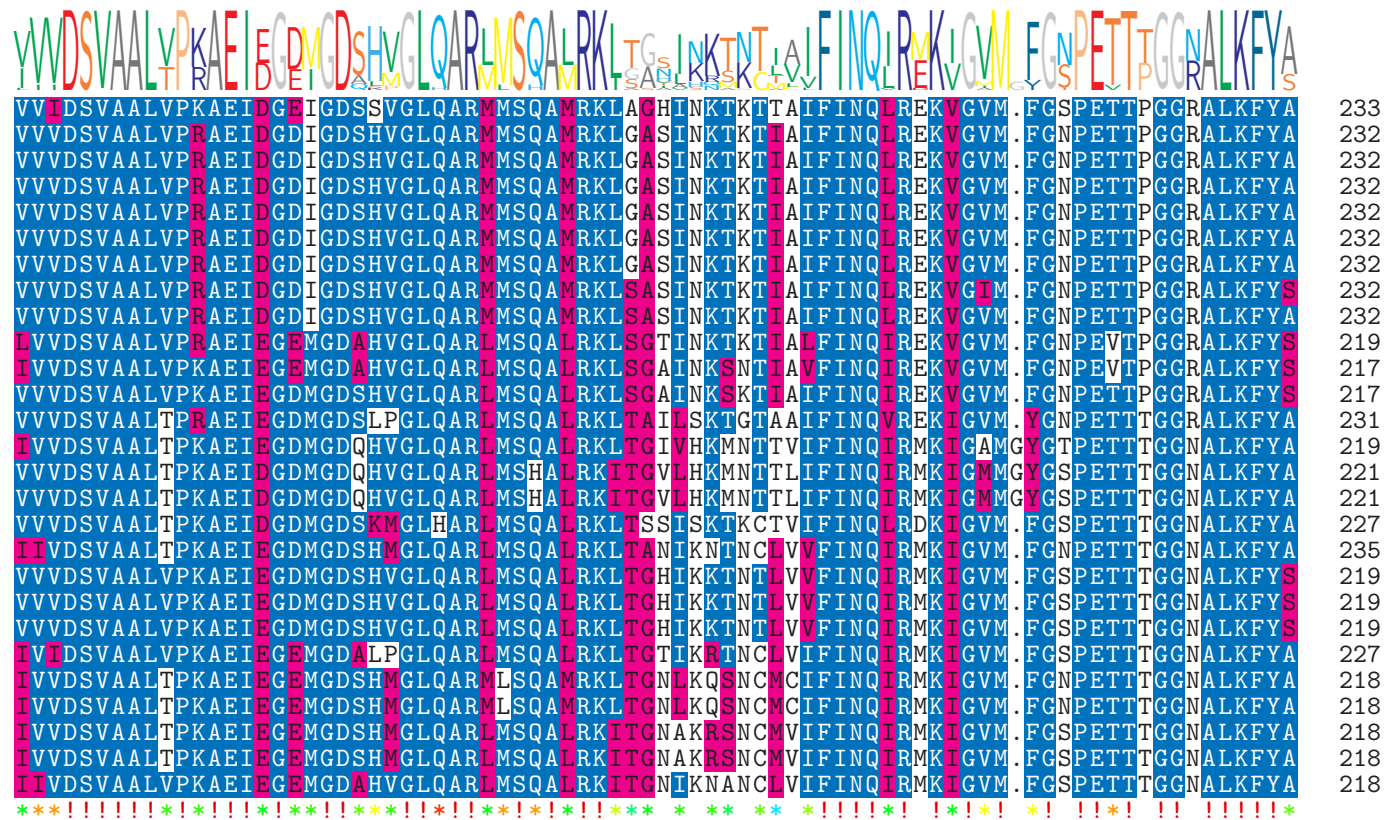
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NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus

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NTDB id 194 SPR RS08825 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKVAPPF	KEAVVE	IMY	GEGIS	KTGEL	LKIAS	SDL	DI	IKKA	GAWYSYK	311					
NTDB id 159 SP RS09750 WP 001085462.1	SVRLDVRG	NTQIKGTG	.DQKETN	VGKETK	IKVVKNKVAPPF	KEAVVE	IMY	GEGIS	KTGEL	LKIAS	SDL	DI	IKKA	GAWYSYK	311					
NTDB id 499 SM12261 RS08315 WP 078228268.1	SVRLDVRG	STQIKGTG	.DQKDTN	VGKETK	IKVVKNKVAPPF	KEAFVE	IMY	GEGIS	KTGEL	LKIAS	SDL	DI	IKKA	GAWYSYK	311					
NTDB id 527 SMSK321 RS11065 WP 001085454.1	SVRLDVRG	STQIKGTG	.DQKDTN	VGKETK	IKVVKNKVAPPF	KEAFVE	IMY	GEGIS	KTGEL	LKIAS	SDL	DI	IKKA	GAWYSYK	311					
NTDB id 408 SMU RS09530 WP 002262392.1	SVRLDVRG	NTQIKGTG	.EQKDSN	IGKETK	IKVVKNKVAPPF	KEAFVE	ITY	GEGIS	RTGEL	VKIAS	SDL	GI	IKKA	GAWYSYN	311					
NTDB id 453 Spy49 1753c ACI62003.1	SVRLDVRG	TTQIKGTG	.DQKDSN	IGKETK	IKVVKNKVAPPF	KVAEVE	IMY	GEGIS	RTGEL	VKIAS	SDL	DI	IKKA	GAWFSYN	311					
NTDB id 625 LCA RS02525 WP 011374196.1	TVRLEVR	RAETIKNGT	DM	IGNRARI	KVVKNKVAPPF	KVAEVD	IMY	GQGIS	RTGEL	VDMA	VEKD	DI	INKS	CSWYSYG	294					
NTDB id 176265 SporoP33 RS14690 WP 081244423.1	SVRLEVR	RGEAIKQGN	DIM	GNKTRIR	VVKNKVAPPF	RTAEVD	IMY	GEGIS	KEGE	ILDG	SELE	EV	VQKS	GAWYSYE	292					
NTDB id 115 BSU 16940 NP 389576.2	SVRLEVR	RAEQLKQGN	DVM	GNKTKI	KVVKNKVAPPF	RTAEVD	IMY	GEGIS	KEGE	ILDG	TELD	DI	VQKS	CSWYSYE	292					
NTDB id 1313 DR RS12030 WP 010888966.1	SVRLDVR	KIGQ....	PTKVGND	AVANTV	KIKTV	VKNKVA	APFKE	VELAL	VYK	GFDQL	SDL	VGLA	ADM	DI	IKKA	GSFYSYG	307			
NTDB id 1245 Cj1673c YP 002345041.1	SVRLDVR	KVAT....	L.KQNE	EPICNR	VKVVKVKNKVAPPF	RQAEFD	DMF	GEGIS	SR	EGEL	IDY	GVKL	DI	VDKS	GAWFSYK	294				
NTDB id 1214 NCTC11637 00359 SQJ03206.1	SVR	IDIRRIAA	L.KQNE	QHIGNRA	KA	KVVKNKVAPPF	REAEFD	IMF	GEGIS	KEGE	IDY	GVKL	DI	VDKS	GAWLSYQ	296				
NTDB id 1211 C694 RS00795 WP 000963128.1	SVR	IDIRRIAS	L.KQNE	QHIGNRA	KA	KVVKNKVAPPF	REAEFD	IMF	GEGIS	KEGE	IDY	GVKL	DI	VDKS	GAWLSYQ	296				
NTDB id 1334 RAOC RS04870 WP 004918236.1	SVR	IDIRRLS	SDTGKIKDKS	GEVIGN	RTKV	KVVKNKVAPPF	KSAEFD	IMY	GEGIS	VSKV	GEILD	VATDL	DI	IQKS	CSWFSYQ	307				
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NTDB id 1130 NGFG RS03960 WP 003688695.1	SVRLD	IRRTGS....	I.KKGEE	VLGNETR	VKVIT	KNKVAPPF	RQAEFD	DILY	GEGIS	WE	GELID	IGVKND	DI	INKS	GAWYSYN	294				
NTDB id 1124 NGFG RS03960 WP 003688695.1	SVRLD	IRRTGS....	I.KKGEE	VLGNETR	VKVIT	KNKVAPPF	RQAEFD	DILY	GEGIS	WE	GELID	IGVKND	DI	INKS	GAWYSYN	294				
NTDB id 1123 OK783 RS03845 WP 003688695.1	SVRLD	IRRTGS....	I.KKGEE	VLGNETR	VKVIT	KNKVAPPF	RQAEFD	DILY	GEGIS	WE	GELID	IGVKND	DI	INKS	GAWYSYN	294				
NTDB id 1427 RS RS02760 WP 011000510.1	SVRLD	IRRIGS....	I.KKGDE	VVGNET	KVKVVKNKVAPPF	REAI	IFD	DILY	GAGV	SR	EGELID	LGVEAK	VVEKS	GAWYSYN	302					
NTDB id 1165 A1552VC RS01565 WP 000344154.1	SVRLD	IRRTGA....	I.KEGE	EVVGNETR	IKVVKNK	IAAPF	KEANTQ	IMY	GQGF	NREGEL	IDLG	VKHKM	VVEKS	GAWYSYN	293					
NTDB id 1142 GTF74 RS11550 WP 000344154.1	SVRLD	IRRTGA....	I.KEGE	EVVGNETR	IKVVKNK	IAAPF	KEANTQ	IMY	GQGF	NREGEL	IDLG	VKHKM	VVEKS	GAWYSYN	293					
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NTDB id 1074 ABD1 RS10195 WP 000344167.1	SVRLD	IRRIGQ....	V.KEGDE	IIVGSET	KVKVVKNKM	APPF	KEAI	IFQILY	GKGT	NQLGEL	VDLAV	QQD	IV	VQKA	GAWYSYQ	293				
NTDB id 1205 PSJM300 05545 AFN77183.1	SVRLD	IRRTGA....	V.KEGDE	VVGNETR	VKVVKVKNKVAPPF	RQAEF	QILY	GKGT	YRNGE	IIDLG	VQQGL	VVEKS	GAWY	AYK	293					
consensus	*	!!	***!	*	*	*	*	*	*****!!	!!	!!	!!	*	*	*****!!	!!	***	!!	!!	*****!

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NTDB id 600 KW2 RS01765 WP 011675413.1	DEKIGQGA	ENAKNYL	KEHQDV	FEIDHKV	RAAHGL	LLDDSEVAET		EEETTAS	KTAKAK	KKEEK	AVETEE	IELELED	387
NTDB id 269 KZH43 RS08665 WP 001085462.1	DEKIGQGS	ENAKKYLA	EHPEIF	FEIDKQV	RSKFGL	IDGEEVSEQ		DTENKK	DE....	PKKEEA	..VNEEV	PLDLGD	380
NTDB id 228 SPD RS09265 WP 001085462.1	DEKIGQGS	ENAKKYLA	EHPEIF	FEIDKQV	RSKFGL	IDGEEVSEQ		DTENKK	DE....	PKKEEA	..VNEEV	PLDLGD	380
NTDB id 194 SPR RS08825 WP 001085462.1	DEKIGQGS	ENAKKYLA	EHPEIF	FEIDKQV	RSKFGL	IDGEEVSEQ		DTENKK	DE....	PKKEEA	..VNEEV	PLDLGD	380
NTDB id 159 SP RS09750 WP 001085462.1	DEKIGQGS	ENAKKYLA	EHPEIF	FEIDKQV	RSKFGL	IDGEEVSEQ		DTENKK	DE....	PKKEEA	..VNEEV	PLDLGD	380
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NTDB id 408 SMU RS09530 WP 002262392.1	GEKIGQGS	ENAKKFLA	DNPEIF	DDIDHKV	RVQYGL	IEEDNTEEK		QSSKEK		ETDEK	..ADKNL	VLELDD	377
NTDB id 453 Spy49 1753c ACI62003.1	GEKIGQGS	ENAKRYLA	DHPQIF	FEIDRKV	RVKFG	LEESEEEESA		MAVASE		E.....	TDDLAL	DLDN	372
NTDB id 625 LCA RS02525 WP 011374196.1	SERIGQGR	ENAKNYLA	DHEDVE	DEVRLK	VRAAYG	ISDVPEEDLP		TT...E	DEQINILP	.DDS...	TEE.....		355
NTDB id 176265 SporoP33 RS14690 WP 081244423.1	GERLGQGR	ENAKQFLK	ENKDMR	NEIAAKI	RESYGL	DSTNYVIAA		HDEED	LEELLMP	.EEK.....			353
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NTDB id 1245 Cj1673c YP 002345041.1	DKKLGQGR	ENSKAFL	KENPEI	ADEITKA	TQNSMG	TEGMI....	SGSEDD	..EGEE					343
NTDB id 1214 NCTC11637 00359 SQJ03206.1	DKKLGQGR	ENAKALLK	EDKALA	DEITLK	IKESIG	SNEEI....	MPLPDE	..PLEE	ME.....				347
NTDB id 1211 C694 RS00795 WP 000963128.1	DKKLGQGR	ENAKALLK	EDKALA	DEITLK	IKESIG	SNEEI....	MPLPDE	..PLEE	ME.....				347
NTDB id 1334 RAOC RS04870 WP 004918236.1	DTKLGQGR	DTVKEL	TKDNPEI	AEELEAKI	REKLQAK								343
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NTDB id 1022 ACIAD RS06390 WP 004925639.1	GNKIGQGG	KNNVIRY	LEENPQ	ISTEIA	VAVIRE	QLLT	KASD....	QTAA	.HDETEE	EPDLL..	ES.....		349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	GNKIGQGG	KNNVIRY	FEENNQ	IAEEI	ERNIRE	QLLT	TGTN....	GAVQ	.I.EDEE	EPDLL..	LES.....		349
NTDB id 1205 PSJM300 05545 AFN77183.1	GSKIGQGG	KANA	AKYLEE	NPEIGQ	EIEQQI	RAKLLV	TSAN....	TKATP	VAEDLAD	ADI.....			347
consensus	***!!!	*****	***	*****	*****	***	***	***			***		

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NTDB id 600 KW2 RS01765 WP 011675413.1		387
NTDB id 269 KZH43 RS08665 WP 001085462.1	ELEIEIEE	388
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NTDB id 115 BSU 16940 NP 389576.2		348
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NTDB id 1074 ABD1 RS10195 WP 000344167.1		349
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consensus		

- ⓧ non conserved
- ✖ similar
- ⓧ ≥ 50% conserved