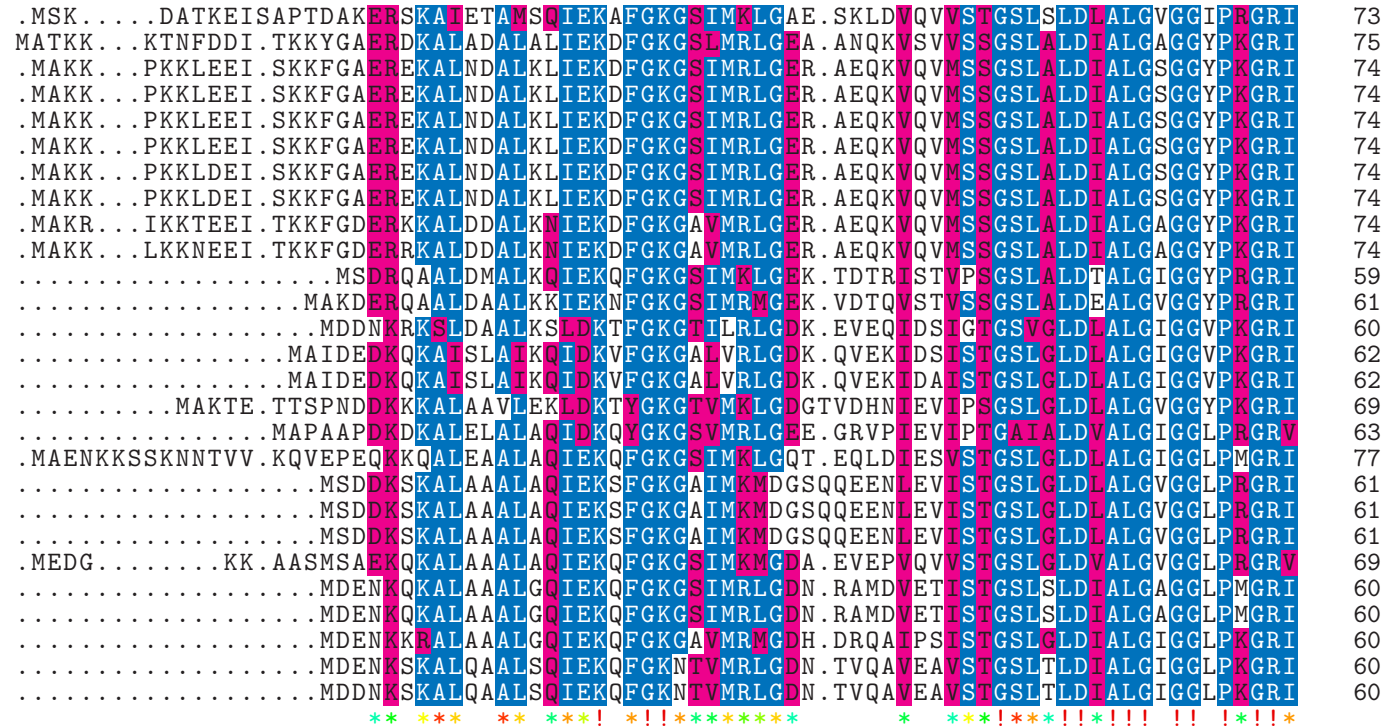


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NTDB id 194 SPR RS08825 WP 001085462.1
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NTDB id 115 BSU 16940 NP 389576.2
NTDB id 625 LCA RS02525 WP 011374196.1
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NTDB id 1211 C694 RS00795 WP 000963128.1
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NTDB id 1334 RAOC RS04870 WP 004918236.1
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NTDB id 1130 NGFG RS03960 WP 003688695.1
NTDB id 1124 NGFG RS03960 WP 003688695.1
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NTDB id 1142 GTF74 RS11550 WP 000344154.1
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NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
consensus

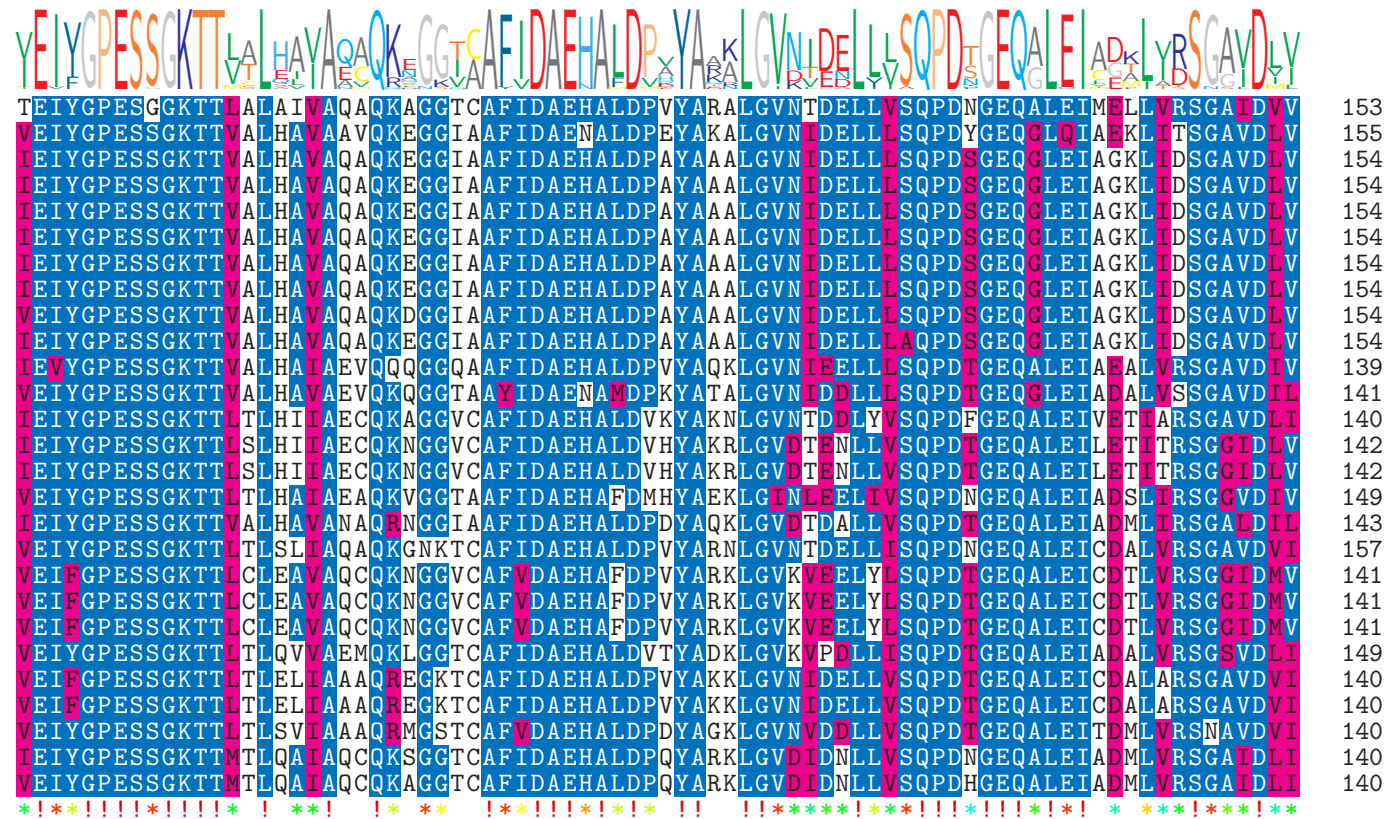
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NTDB id 1205 PSJM300 05545 AFN77183.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
consensus

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logo

NTDB id 1313 DR RS12030 WP 010888966.1	VRLDVRKIGQ...PTKVGND	AVANTV	KIKTVKNKV	AAPFKE	VELAL	IVYGK	GFDQLS	DLVGL	AADM	DI	TKKAGS	FYSY	GD	308																							
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NTDB id 269 KZH43 RS08665 WP 001085462.1	VRLDVRGNTQIKGTG.DQKET	NVGKET	KIKVVKNKV	VAPPFK	EAVVE	IMYG	EGIS	KTGELL	KI	ASDL	DI	TKKAGA	WYSY	KD	312																						
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NTDB id 1211 C694 RS00795 WP 000963128.1	VRLDIRRIAS....L.KQNE	QHIGN	RAKIKVVKNKV	VAPPFR	EAEFD	IMFG	EGIS	KEGE	II	DYG	VK	L	DIVD	KSGA	WLSY	QD	297																				
NTDB id 1214 NCTC11637 00359 SQJ03206.1	VRLDIRRIAA....L.KQNE	QHIGN	RAKIKVVKNKV	VAPPFR	EAEFD	IMFG	EGIS	KEGE	II	DYG	VK	L	DIVD	KSGA	WLSY	QD	297																				
NTDB id 1334 RAOC RS04870 WP 004918236.1	VRLDIRRSLSDTGKIKDKS	GEVIGN	RTKIKVVKNKV	VAPPFK	SAEFD	IMYG	EGV	SKVGE	IL	D	V	ATD	L	DI	IQKSGS	WFSY	QD	308																			
NTDB id 202875 BKN51 RS04280 WP 101606377.1	VRLDVRRIET....L.KDGG	EPVGN	RTIKVVKNKV	VAPPFK	QAEFD	ILYG	KG	ISREG	SL	IDM	G	V	D	Q	ILRKSG	AWY	TY	EG	297																		
NTDB id 1389 A4U84 RS07560 WP 021112712.1	VRLDIRRCGV....V.KDGE	DEIIG	SETKIKVVKNKV	VAPPFR	REVQ	FDIM	YG	EGIS	RM	NELL	IL	A	E	A	NG	FI	KKSG	AW	F	SY	DG	311															
NTDB id 1130 NGFG RS03960 WP 003688695.1	VRLDIRRTGS....I.KKGE	EEVLGN	ETRVKVI	KNKVAPP	FRQAE	FDIL	YG	EGIS	W	EGEL	ID	I	G	V	K	N	DI	INKSG	AW	YS	SY	NG	295														
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NTDB id 1123 OK783 RS03845 WP 003688695.1	VRLDIRRTGS....I.KKGE	EEVLGN	ETRVKVI	KNKVAPP	FRQAE	FDIL	YG	EGIS	W	EGEL	ID	I	G	V	K	N	DI	INKSG	AW	YS	SY	NG	295														
NTDB id 1427 RS RS02760 WP 011000510.1	VRLDIRRIGS....I.KKGE	DEVVGN	ETKIKVVKNKV	VAPPFR	EAI	FDIL	YG	AGV	S	REGE	II	D	L	G	V	E	A	K	V	E	K	S	G	A	W	Y	S	Y	NG	303							
NTDB id 1165 A1552VC RS01565 WP 000344154.1	VRLDIRRTGA....I.KEGE	EEVVG	NETRIKVVKNK	IAAPF	KEANT	QIMYG	GGFN	REGEL	ID	L	G	V	K	H	K	M	V	E	K	S	G	A	W	Y	S	Y	NG	294									
NTDB id 1142 GTF74 RS11550 WP 000344154.1	VRLDIRRTGA....I.KEGE	EEVVG	NETRIKVVKNK	IAAPF	KEANT	QIMYG	GGFN	REGEL	ID	L	G	V	K	H	K	M	V	E	K	S	G	A	W	Y	S	Y	NG	294									
NTDB id 1205 PSJM300 05545 AFN77183.1	VRLDIRRTGA....V.KEGE	DEVVGS	ETRVKVVKNKV	VAPPFR	QAEF	QILY	GKGI	YRN	GE	II	D	L	G	V	Q	Q	L	V	E	K	S	G	A	W	Y	A	Y	K	G	294							
NTDB id 1074 ABD1 RS10195 WP 000344167.1	VRLDIRRIGQ....V.KEGE	DEIVGS	ETKIKVVKNK	MAPPF	KEA	IFQIL	YGK	G	T	N	Q	L	G	E	L	V	D	L	A	V	Q	Q	D	I	V	Q	K	A	G	A	W	Y	S	Y	Q	G	294
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consensus	!!****!	*	*	*	*	*	*	*****!!!!!!*!!*!!*	*	*****!!****	*****	***	!!****!																								

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NTDB id 1313 DR RS12030 WP 010888966.1	ERIGQGKEKTIA Y IAERP ME EQEIRDRVMAAIRAGNAGEAPALAPAPAA.....PEAAEA.....	363
NTDB id 600 KW2 RS01765 WP 011675413.1	EKIGQGA E KAK N YLKEHQDV F DEIDHKVRAAHGLDDSEVAETEEETTAS K TKAKAKKEEKAVETEEIELELED.....	387
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NTDB id 159 SP RS09750 WP 001085462.1	EKIGQGS E NAKKYLAEHPEIFDEIDKQVRSKFGLIDGEEVSEQDTENKKDE....PKKEEA..VNEEVPLDLGDELEIEI	386
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NTDB id 408 SMU RS09530 WP 002262392.1	EKIGQGS E NAKKFLADNPEIFDDIDHKVVRVQYGLIEEDNTEEEKQSSKEK.....ETDEK..ADKNLVLELDDTIELED	383
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NTDB id 625 LCA RS02525 WP 011374196.1	ERIGQGR E NAK N YLADHEDVEDEVRLKVRAAYGISDVPEEDLPTTEDE.QI.NILPDDST.....EE.....	355
NTDB id 1245 Cj1673c YP 002345041.1	KKLGGGREN S KAFLKENPEIADEITKAIQNSMGIEGMISGS ED DE..GEE.....	343
NTDB id 1211 C694 RS00795 WP 000963128.1	KKLGQGR E NAKALLKEDKALADEITLKIKESIGSNEEIMPLPDEP..LEEM.E.....	347
NTDB id 1214 NCTC11637 00359 SQJ03206.1	KKLGQGR E NAKALLKEDKALADEITLKIKESIGSNEEIMPLPDEP..LEEM.E.....	347
NTDB id 1334 RAOC RS04870 WP 004918236.1	TKLGQGRD T VKELIKDNPELAELEAKIREKLQAK.....	343
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NTDB id 1130 NGFG RS03960 WP 003688695.1	AKIGQGGKDNVRVWLKENPEISDEIDAKIRALNGVEMHITEGTQDET.....DGER.....PEE.....	348
NTDB id 1124 NGFG RS03960 WP 003688695.1	AKIGQGGKDNVRVWLKENPEISDEIDAKIRALNGVEMHITEGTQDET.....DGER.....PEE.....	348
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NTDB id 1427 RS RS02760 WP 011000510.1	ERIGQGRDNCREFLRENAELAREIENKVREHLGVTPMGAVTLA.EEVEED.....	352
NTDB id 1165 A1552VC RS01565 WP 000344154.1	DKIGQGGKANACKY L KENPEIAKTLDKKLREMLLNPNENMQLIAETSSAADDV.EFGAV.....PEEF.....	354
NTDB id 1142 GTF74 RS11550 WP 000344154.1	DKIGQGGKANACKY L KENPEIAKTLDKKLREMLLNPNENMQLIAETSSAADDV.EFGAV.....PEEF.....	354
NTDB id 1205 PSJM300 05545 AFN77183.1	SKIGQGGKANA A KYLEENPEIGQEIEQQIRAKLLVTSANTKATPVAEDLADA.D..I.....	347
NTDB id 1074 ABD1 RS10195 WP 000344167.1	NKIGQGGK N NVIRYFEENNQIAEEIERNIREQLLTGTNGAVQ.I.EDEEEP.D..LL.....LES.....	349
NTDB id 1022 ACIAD RS06390 WP 004925639.1	NKIGQGGK N NVIRYLEENPQISTEIEAVIREQLLTKASDQTAA.HDETEEEP.D..LL.....ES.....	349
consensus	***!!***** ** ***** ***** ** ** *	

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NTDB id 1313 DR RS12030 WP 010888966.1	..	363
NTDB id 600 KW2 RS01765 WP 011675413.1	..	387
NTDB id 269 KZH43 RS08665 WP 001085462.1	EE	388
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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 408 SMU RS09530 WP 002262392.1	..	383
NTDB id 453 Spy49 1753c ACI62003.1	..	378
NTDB id 115 BSU 16940 NP 389576.2	..	348
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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
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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
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NTDB id 1205 PSJM300 05545 AFN77183.1	..	347
NTDB id 1074 ABD1 RS10195 WP 000344167.1	..	349
NTDB id 1022 ACIAD RS06390 WP 004925639.1	..	349

consensus

 non conserved
 similar
 ≥ 50% conserved