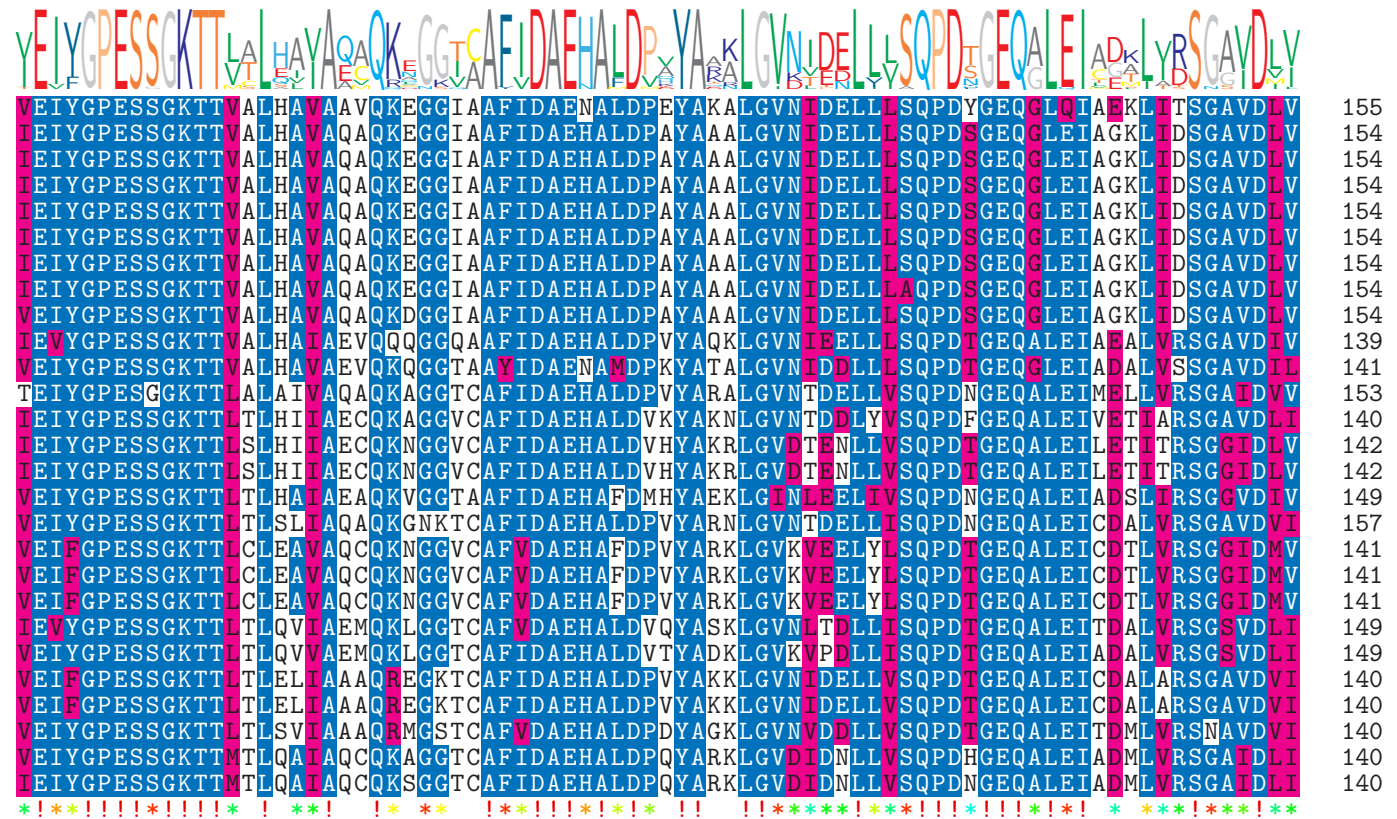


NTDB id 600	KW2 RS01765 WP 011675413.1	MATK....KKTNFDDITKKYGA	ERD	KAL	ADAL	AL	IEKD	FGKGS	LMRLGE	AANQ	.K	VSV	VSSGSL	ALDI	IALG	AGGY	PKGRI	75																																			
NTDB id 269	KZH43 RS08665 WP 001085462.1	.MAK....KPKKLEEISKKFGA	ERE	KAL	NDAL	KL	IEKD	FGKGS	SIMRLGE	RAEQ	.KVQVM	SSSGSL	ALDI	IALG	SGGY	PKGRI	74																																				
NTDB id 228	SPD RS09265 WP 001085462.1	.MAK....KPKKLEEISKKFGA	ERE	KAL	NDAL	KL	IEKD	FGKGS	SIMRLGE	RAEQ	.KVQVM	SSSGSL	ALDI	IALG	SGGY	PKGRI	74																																				
NTDB id 194	SPR RS08825 WP 001085462.1	.MAK....KPKKLEEISKKFGA	ERE	KAL	NDAL	KL	IEKD	FGKGS	SIMRLGE	RAEQ	.KVQVM	SSSGSL	ALDI	IALG	SGGY	PKGRI	74																																				
NTDB id 159	SP RS09750 WP 001085462.1	.MAK....KPKKLEEISKKFGA	ERE	KAL	NDAL	KL	IEKD	FGKGS	SIMRLGE	RAEQ	.KVQVM	SSSGSL	ALDI	IALG	SGGY	PKGRI	74																																				
NTDB id 527	SMSK321 RS11065 WP 001085454.1	.MAK....KPKKLDEISKKFGA	ERE	KAL	NDAL	KL	IEKD	FGKGS	SIMRLGE	RAEQ	.KVQVM	SSSGSL	ALDI	IALG	SGGY	PKGRI	74																																				
NTDB id 499	SM12261 RS08315 WP 078228268.1	.MAK....KPKKLDEISKKFGA	ERE	KAL	NDAL	KL	IEKD	FGKGS	SIMRLGE	RAEQ	.KVQVM	SSSGSL	ALDI	IALG	SGGY	PKGRI	74																																				
NTDB id 453	Spy49 1753c ACI62003.1	.MAK....KLKKNEEITKKFGD	ERR	KAL	DDAL	KN	IEKD	FGKGA	VIMRLGE	RAEQ	.KVQVM	SSSGSL	ALDI	IALG	AGGY	PKGRI	74																																				
NTDB id 408	SMU RS09530 WP 002262392.1	.MAK....RIKKTEEITKKFGD	ERR	KAL	DDAL	KN	IEKD	FGKGA	VIMRLGE	RAEQ	.KVQVM	SSSGSL	ALDI	IALG	AGGY	PKGRI	74																																				
NTDB id 115	BSU 16940 NP 389576.2	MSDRQAALDMALKQ	IEK	Q	FGKGS	IMKL	GEK	TD	R	IST	VS	SGSL	ALD	TAL	GIG	YPR	GRI	59																																			
NTDB id 625	LCA RS02525 WP 011374196.1	MAKD	ERQAAL	DAAL	KK	IEKN	FGKGS	IMRM	G	KEV	DT	.Q	VST	VSSGSL	ALDE	ALG	VGGY	PRGRI	61																																		
NTDB id 1313	DR RS12030 WP 010888966.1	MSKDATKEISAPTDAK	ERS	KA	TETAM	SQ	IEKA	FGKGS	IMKL	G	AES	KL	.D	VQV	VST	GSL	S	LDL	ALG	VGGI	PRGRI	73																															
NTDB id 1245	Cj1673c YP 002345041.1	MDDNKR	KS	LD	AA	LKS	LD	K	T	FGKGT	IL	RL	G	D	K	E	V	E	.Q	IDS	IG	T	G	S	V	G	L	D	L	AL	G	I	G	G	V	P	K	G	R	I	60												
NTDB id 1214	NCTC11637 00359 SQJ03206.1	MAIDED	KQ	KA	ISLA	IK	Q	ID	K	V	F	G	K	G	A	L	V	R	L	G	D	K	Q	V	E	.K	IDA	IST	G	S	L	G	L	D	L	AL	G	I	G	G	V	P	K	G	R	I	62						
NTDB id 1211	C694 RS00795 WP 000963128.1	MAIDED	KQ	KA	ISLA	IK	Q	ID	K	V	F	G	K	G	A	L	V	R	L	G	D	K	Q	V	E	.K	IDA	IST	G	S	L	G	L	D	L	AL	G	I	G	G	V	P	K	G	R	I	62						
NTDB id 1334	RAOC RS04870 WP 004918236.1	MAKT..ETTSPND	DKK	K	AA	LV	LEK	L	D	K	T	Y	G	K	T	M	K	L	G	D	G	T	V	D	H	N	.IEV	IP	S	G	S	L	G	L	D	L	AL	G	V	G	G	P	K	G	R	I	69						
NTDB id 1389	A4U84 RS07560 WP 021112712.1	MAENKKSSKNNTV..VKQVEP	EQ	KQ	AA	LA	AA	LA	Q	IEK	Q	FGKGS	IMKL	G	Q	T	E	Q	L	.D	IES	V	T	G	S	L	G	L	D	L	AL	G	I	G	G	L	P	M	G	R	I	77											
NTDB id 1130	NGFG RS03960 WP 003688695.1	MSD	DK	S	K	AA	LA	AA	LA	Q	IEK	S	F	G	K	G	A	IM	K	M	D	G	S	Q	Q	E	E	N	.L	E	V	I	S	T	G	S	L	G	L	D	L	AL	G	V	G	G	L	P	M	G	R	I	61
NTDB id 1124	NGFG RS03960 WP 003688695.1	MSD	DK	S	K	AA	LA	AA	LA	Q	IEK	S	F	G	K	G	A	IM	K	M	D	G	S	Q	Q	E	E	N	.L	E	V	I	S	T	G	S	L	G	L	D	L	AL	G	V	G	G	L	P	M	G	R		

```

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
NTDB id 1124 NGFG RS03960 WP 003688695.1
NTDB id 1123 OK783 RS03845 WP 003688695.1
NTDB id 165859 AVS77 RS06655 WP 003812760.1
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 1205 PSJM300 05545 AFN77183.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus

```



logo

NTDB id 600 KW2 RS01765 WP 011675413.1	EKIGQGA	EKAKNYLKEHQDV	DEIDHKVRAAHG	ILDDSEVAE..	TEEETTAS	TKAKAKKEEK	AVETEEIELE	LED....	387	
NTDB id 269 KZH43 RS08665 WP 001085462.1	EKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKF	GLIDGEEVSE..	QDTENKK	DE....	PKKEEA..	VNEEVPLDLGDELEI	384	
NTDB id 228 SPD RS09265 WP 001085462.1	EKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKF	GLIDGEEVSE..	QDTENKK	DE....	PKKEEA..	VNEEVPLDLGDELEI	384	
NTDB id 194 SPR RS08825 WP 001085462.1	EKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKF	GLIDGEEVSE..	QDTENKK	DE....	PKKEEA..	VNEEVPLDLGDELEI	384	
NTDB id 159 SP RS09750 WP 001085462.1	EKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKF	GLIDGEEVSE..	QDTENKK	DE....	PKKEEA..	VNEEVPLDLGDELEI	384	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	EKIGQGS	ENAKKYLADNPEV	FAEIDHQVRVQ	FGLIDGEEAAE.....	SKKDE....	VAQVDS..	VNEEVTLDLGDELEI		380	
NTDB id 499 SM12261 RS08315 WP 078228268.1	EKIGQGS	ENAKKYLADNPEIF	DEIDHQVRVQ	FGLIDGEEIAE.....	SKKDE....	AAQVDS..	VNEEVTLDLGDELEI		380	
NTDB id 453 Spy49 1753c ACI62003.1	EKIGQGS	ENAKRYLADHPQL	FDEIDRKVRVK	FGLLEESEEEES..	AMAVASE.....	E.....	TDDLALDLN	NGIEI	376	
NTDB id 408 SMU RS09530 WP 002262392.1	EKIGQGS	ENAKKFLADNPEIF	DDIDHKVRVQ	YGLIEEDNTEE..	KQSSKEK.....	ETDEK..	ADKNLVLEL	DDTIEL	381	
NTDB id 115 BSU 16940 NP 389576.2	ERLGGG	RENAKQFLKENK	DIMLMIQEQ	IREHYGLDNN	GVVQQ..	QAEETQEEL	EFEE.E.....		348	
NTDB id 625 LCA RS02525 WP 011374196.1	ERIGQG	RENAKNYLADHED	VEDEVRLKVRA	AYGISDVPEEDL..	PTTEDE.QI.	NILPDDST....	EE.....		355	
NTDB id 1313 DR RS12030 WP 010888966.1	ERIGQG	KEKTIA	YTAERP	MEQEIRDRVMA	AIRAGNAGEA	PALAPAPAA	PEAA.EA.....		363	
NTDB id 1245 Cj1673c YP 002345041.1	KKLGGG	RENSKAFLKEN	PEIADEITKA	IQNSMCI	EGMIS..	GSE....	DDEGE.E.....		343	
NTDB id 1214 NCTC11637 00359 SQJ03206.1	KKLGGG	RENAKALLKED	KALADEITLK	IKESIGS	NEEIM..	PLP....	DEPLE.EME.....		347	
NTDB id 1211 C694 RS00795 WP 000963128.1	KKLGGG	RENAKALLKED	KALADEITLK	IKESIGS	NEEIM..	PLP....	DEPLE.EME.....		347	
NTDB id 1334 RAOC RS04870 WP 004918236.1	TKLGGG	RD	TVKELIKDN	PELAEELEAK	IREKLQAK.....				343	
NTDB id 1389 A4U84 RS07560 WP 021112712.1	TKIGQG	KNNAVKWLKEN	PEIADKLEQE	IRNTLASNP	NSV..	LKATASDSN	DES.DVEEF.....	SEEEL.....	372	
NTDB id 1130 NGFG RS03960 WP 003688695.1	AKIGQG	KDNVRVWLKEN	PEISDEIDAK	IRALNGVEM	HIT..E.....	GTQDE.TD	GER.....	PEE.....	348	
NTDB id 1124 NGFG RS03960 WP 003688695.1	AKIGQG	KDNVRVWLKEN	PEISDEIDAK	IRALNGVEM	HIT..E.....	GTQDE.TD	GER.....	PEE.....	348	
NTDB id 1123 OK783 RS03845 WP 003688695.1	AKIGQG	KDNVRVWLKEN	PEISDEIDAK	IRALNGVEM	HIT..E.....	GTQDE.TD	GER.....	PEE.....	348	
NTDB id 165859 AVS77 RS06655 WP 003812760.1	NRIGQG	KDNVREYLKEH	KEMAI	EIENKVREN	CGIVSRAA..	T.FPASEA	EDGE.....		353	
NTDB id 1427 RS RS02760 WP 011000510.1	ERIGQG	RDNCR	REFLRENAEL	AREIENKVRE	HLGVTPMGA..	V.TLAEE	VEED.....		352	
NTDB id 1165 A1552VC RS01565 WP 000344154.1	DKIGQG	KANACKY	LKENPEIAKT	LDKKLREML	LN	PENMQ..	LIAETSSA	ADDV.EFGAV.....	PEEF.....	354
NTDB id 1142 GTF74 RS11550 WP 000344154.1	DKIGQG	KANACKY	LKENPEIAKT	LDKKLREML	LN	PENMQ..	LIAETSSA	ADDV.EFGAV.....	PEEF.....	354
NTDB id 1205 PSJM300 05545 AFN77183.1	SKIGQG	KANA	AKYLEENPEI	GQIEQQIRAK	LLVTSANT..	KATPVAED	LADA.DI.....		347	
NTDB id 1022 ACIAD RS06390 WP 004925639.1	NKIGQG	KNNVIRY	LEENPQISTE	IEAVIREQL	LLTKASDQ..	TAA.HDETE	EEP.DLL.....	ES.....	349	
NTDB id 1074 ABD1 RS10195 WP 000344167.1	NKIGQG	KNNVIRY	FEENNQIAE	EIERNIREQL	LLTTGTNG..	AVQ.I.EDEE	EP.DLL.....	LES.....	349	
consensus	***!!!*****	**	*	***	*****	**	*	*		

logo

		EIEE	
NTDB id 600 KW2 RS01765 WP 011675413.1	....		387
NTDB id 269 KZH43 RS08665 WP 001085462.1	EIEE		388
NTDB id 228 SPD RS09265 WP 001085462.1	EIEE		388
NTDB id 194 SPR RS08825 WP 001085462.1	EIEE		388
NTDB id 159 SP RS09750 WP 001085462.1	EIEE		388
NTDB id 527 SMSK321 RS11065 WP 001085454.1	EIEE		384
NTDB id 499 SM12261 RS08315 WP 078228268.1	EIEE		384
NTDB id 453 Spy49 1753c ACI62003.1	ED..		378
NTDB id 408 SMU RS09530 WP 002262392.1	ED..		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
NTDB id 1124 NGFG RS03960 WP 003688695.1	....		348
NTDB id 1123 OK783 RS03845 WP 003688695.1	....		348
NTDB id 165859 AVS77 RS06655 WP 003812760.1	....		353
NTDB id 1427 RS RS02760 WP 011000510.1	....		352
NTDB id 1165 A1552VC RS01565 WP 000344154.1	....		354
NTDB id 1142 GTF74 RS11550 WP 000344154.1	....		354
NTDB id 1205 PSJM300 05545 AFN77183.1	....		347
NTDB id 1022 ACIAD RS06390 WP 004925639.1	....		349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	....		349
consensus			

-  non conserved
-  similar
-  ≥ 50% conserved