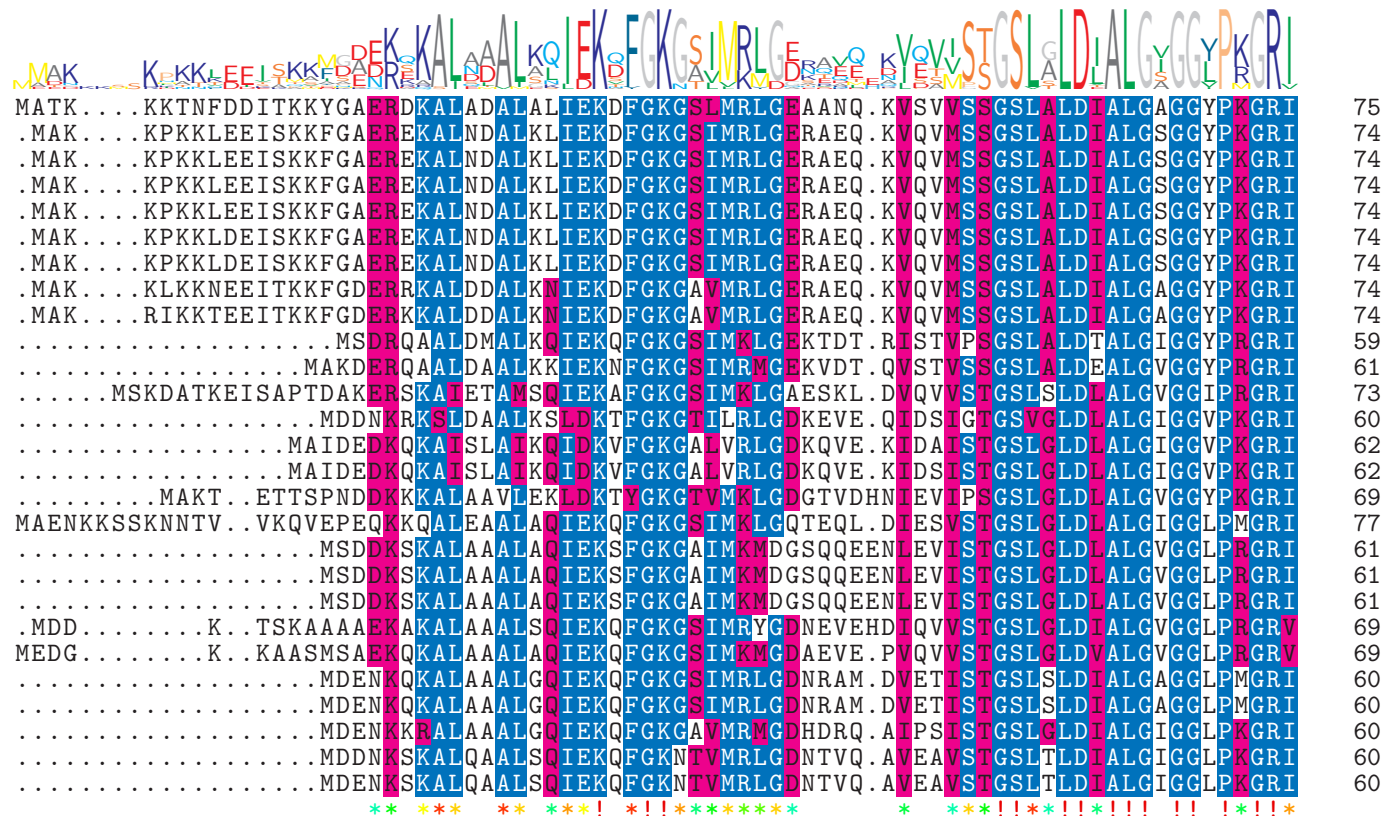


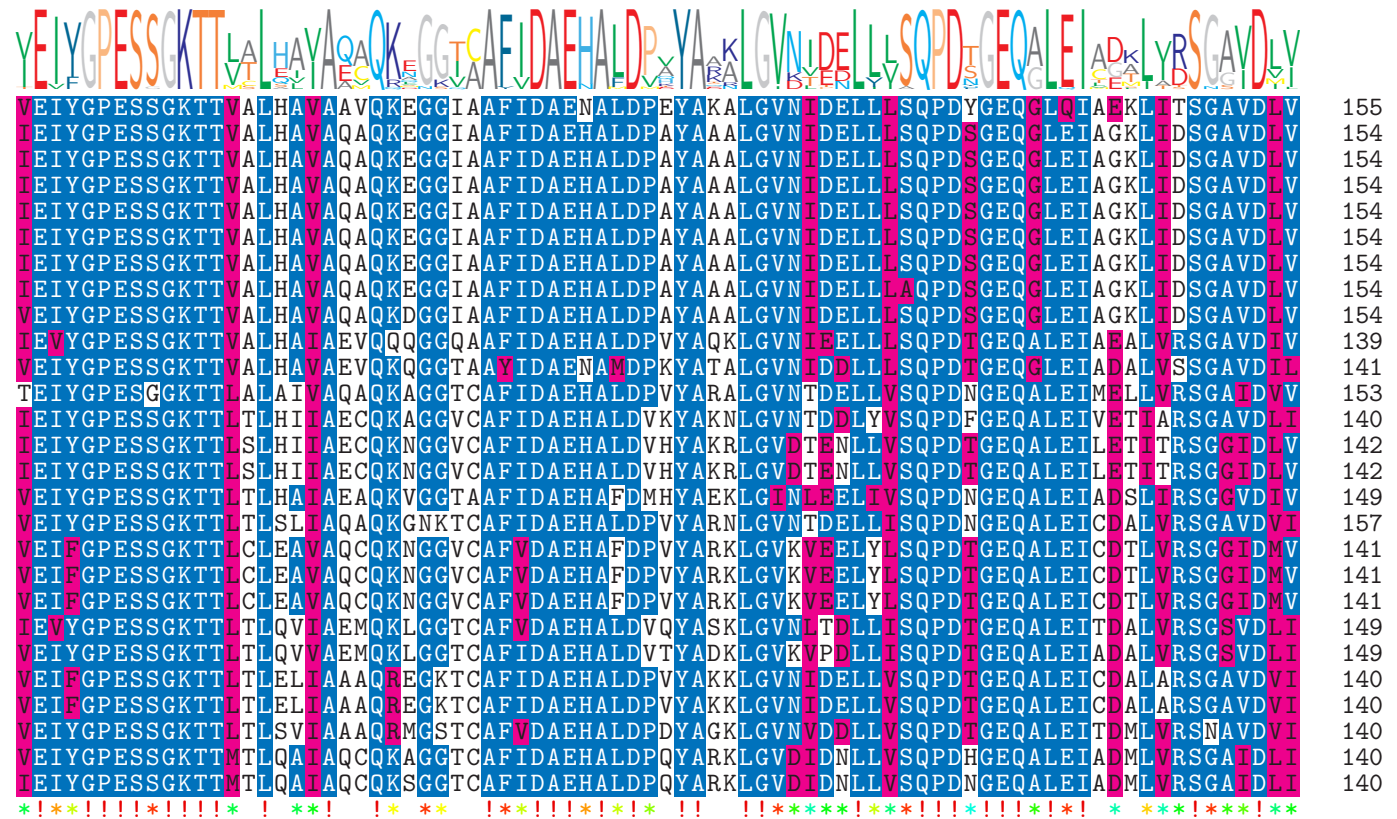
NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
NTDB id 228 SPD RS09265 WP 001085462.1
NTDB id 194 SPR RS08825 WP 001085462.1
NTDB id 159 SP RS09750 WP 001085462.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 453 Spy49 1753c 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 165898 AVS80 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



```

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 165898 AVS80 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	LDDSEVAE	..	TEEETTAS	TKAKAKKEEK	AVETEEIELE	LED....	387
NTDB id 269 KZH43 RS08665 WP 001085462.1	EKIGQGS	ENAKKYLA	EHPEIF	DEIDKQVRSKF	GLIDGEEVSE	..	QDTENKK	DE....	PKKEEA..VNEEVPLDLGDELEI	384
NTDB id 228 SPD RS09265 WP 001085462.1	EKIGQGS	ENAKKYLA	EHPEIF	DEIDKQVRSKF	GLIDGEEVSE	..	QDTENKK	DE....	PKKEEA..VNEEVPLDLGDELEI	384
NTDB id 194 SPR RS08825 WP 001085462.1	EKIGQGS	ENAKKYLA	EHPEIF	DEIDKQVRSKF	GLIDGEEVSE	..	QDTENKK	DE....	PKKEEA..VNEEVPLDLGDELEI	384
NTDB id 159 SP RS09750 WP 001085462.1	EKIGQGS	ENAKKYLA	EHPEIF	DEIDKQVRSKF	GLIDGEEVSE	..	QDTENKK	DE....	PKKEEA..VNEEVPLDLGDELEI	384
NTDB id 527 SMSK321 RS11065 WP 001085454.1	EKIGQGS	ENAKKYLADN	PEVFAE	IDHQVRVQF	GLIDGEEAAE	.....	SKKDE	....	VAQVDS..VNEEVTLDLGDELEI	380
NTDB id 499 SM12261 RS08315 WP 078228268.1	EKIGQGS	ENAKKYLADN	PEIF	DEIDHQVRVQF	GLIDGEEIAE	.....	SKKDE	....	AAQVDS..VNEEVTLDLGDELEI	380
NTDB id 453 Spy49 1753c ACI62003.1	EKIGQGS	ENAKRYLADHP	QLFDE	IDRKVRVKF	GLLEESEEE	..	AMAVASE	.....	E.....TDDLALDLNNGIEI	376
NTDB id 408 SMU RS09530 WP 002262392.1	EKIGQGS	ENAKKFLADN	PEIF	DDIDHKVRVQY	GLIEEDNTEE	..	KQSSKEK	.....	ETDEK..ADKNLVLELDDTIEL	381
NTDB id 115 BSU 16940 NP 389576.2	ERLGGG	RENAKQFLKEN	KDIMLMIQEQ	IREHYGLD	NNGVVQQ	..	QAEETQEEL	..EFE	.....	348
NTDB id 625 LCA RS02525 WP 011374196.1	ERIGQG	RENAKNYLADH	EDVEDEV	RLKVR	AAYGIS	SDVPEEDL	..	PTTEDE	..QI.NILPDDST.....EE	355
NTDB id 1313 DR RS12030 WP 010888966.1	ERIGQG	KEKTIAYIA	ERP	MEQEIR	DRVMAA	IRAGNAGEA	PALAPAPA	AAPEAA	..EA.....	363
NTDB id 1245 Cj1673c YP 002345041.1	KKLGGG	RENSKAFLKEN	PEIADE	ITKAIQNS	MCIEGMIS	..	GSE....	DDEGE	..E.....	343
NTDB id 1214 NCTC11637 00359 SQJ03206.1	KKLGGG	RENAKALLKED	KALADE	ITLKIKES	IGSNEEIM	..	PLP....	DEPLE	..EME.....	347
NTDB id 1211 C694 RS00795 WP 000963128.1	KKLGGG	RENAKALLKED	KALADE	ITLKIKES	IGSNEEIM	..	PLP....	DEPLE	..EME.....	347
NTDB id 1334 RAOC RS04870 WP 004918236.1	TKLGGG	RD	TVKELIKDN	PELAEE	LEAKIRE	KLQAK	.....	.....	.....	343
NTDB id 1389 A4U84 RS07560 WP 021112712.1	TKIGQG	KNNAVKWLKEN	PEIADKLE	QEIRNTL	ASNPN	SV..	LKATAS	DSNDES	..DVVEEF.....SEEL	372
NTDB id 1130 NGFG RS03960 WP 003688695.1	AKIGQG	KDNVRVWLKEN	PEISDE	IDAKIRAL	NGVEMHIT	..	E.....	GTQDE	..TDGER.....PEE	348
NTDB id 1124 NGFG RS03960 WP 003688695.1	AKIGQG	KDNVRVWLKEN	PEISDE	IDAKIRAL	NGVEMHIT	..	E.....	GTQDE	..TDGER.....PEE	348
NTDB id 1123 OK783 RS03845 WP 003688695.1	AKIGQG	KDNVRVWLKEN	PEISDE	IDAKIRAL	NGVEMHIT	..	E.....	GTQDE	..TDGER.....PEE	348
NTDB id 165898 AVS80 RS06655 WP 003812760.1	NRIGQG	KDNVREYLKEH	KEMAI	EIENKVR	ENQ	IVSRAA	..	T.FPASEA	EDGE.....	353
NTDB id 1427 RS RS02760 WP 011000510.1	ERIGQG	RDNCREFL	RENAELARE	EIENKVR	REHLGV	TPMGA	..	V.TLAE	EEVEED.....	352
NTDB id 1165 A1552VC RS01565 WP 000344154.1	DKIGQG	KANACKY	LKENPEIA	KTLDK	KLREML	LN	PENMQ	..	LIAETSSAADDV.EFGAV.....PEEF	354
NTDB id 1142 GTF74 RS11550 WP 000344154.1	DKIGQG	KANACKY	LKENPEIA	KTLDK	KLREML	LN	PENMQ	..	LIAETSSAADDV.EFGAV.....PEEF	354
NTDB id 1205 PSJM300 05545 AFN77183.1	SKIGQG	KANA	AKYLEEN	PEIGQ	EIEQQ	IRAKLL	TSANT	..	KATPVAEDLADA.DI.....	347
NTDB id 1022 ACIAD RS06390 WP 004925639.1	NKIGQG	KNNVIRY	LEENP	QISTE	IEAV	IREQL	LT	KASDQ	..TAA.HDETEEP.DLL.....ES	349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	NKIGQG	KNNVIRY	FEENN	QIAE	EIERN	IREQL	LT	TGTNG	..AVQ.I.EDEEP.DLL.....LES	349
consensus	**!!!	*****	**	*	***	*****	**	*	*	

logo

		E	L	E	E	
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 165898	AVS80	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