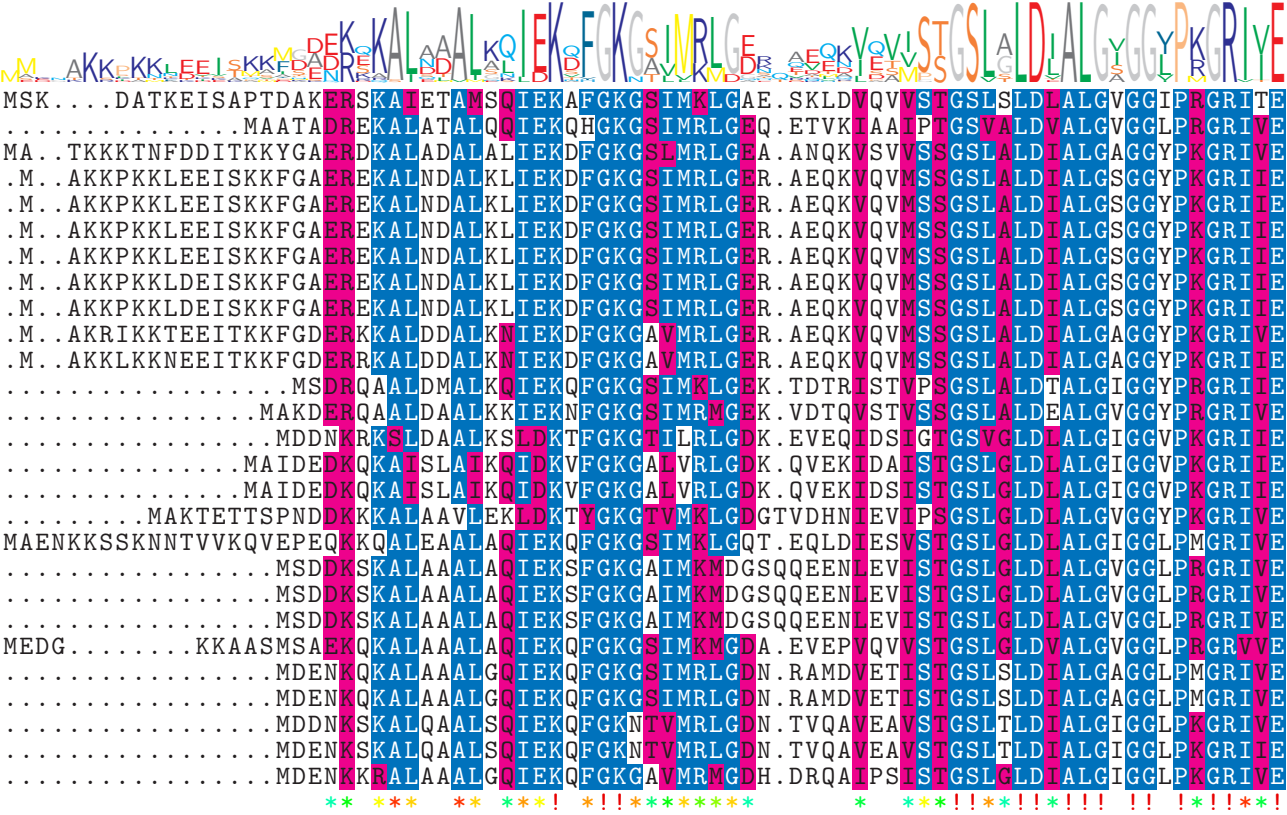


logo

NTDB id 1313 DR RS12030 WP 010888966.1
NTDB id 29694 TIA2EST36 RS05005 WP 002515492.1
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 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 115 BSU 16940 NP 389576.2
NTDB id 625 LCA RS02525 WP 011374196.1
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 1427 RS RS02760 WP 011000510.1
NTDB id 1165 A1552VC RS01565 WP 000344154.1
NTDB id 1142 GTF74 RS11550 WP 000344154.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus



75
64
77
76
76
76
76
76
76
76
76
76
61
63
62
64
64
71
79
63
63
63
71
62
62
62
62
62

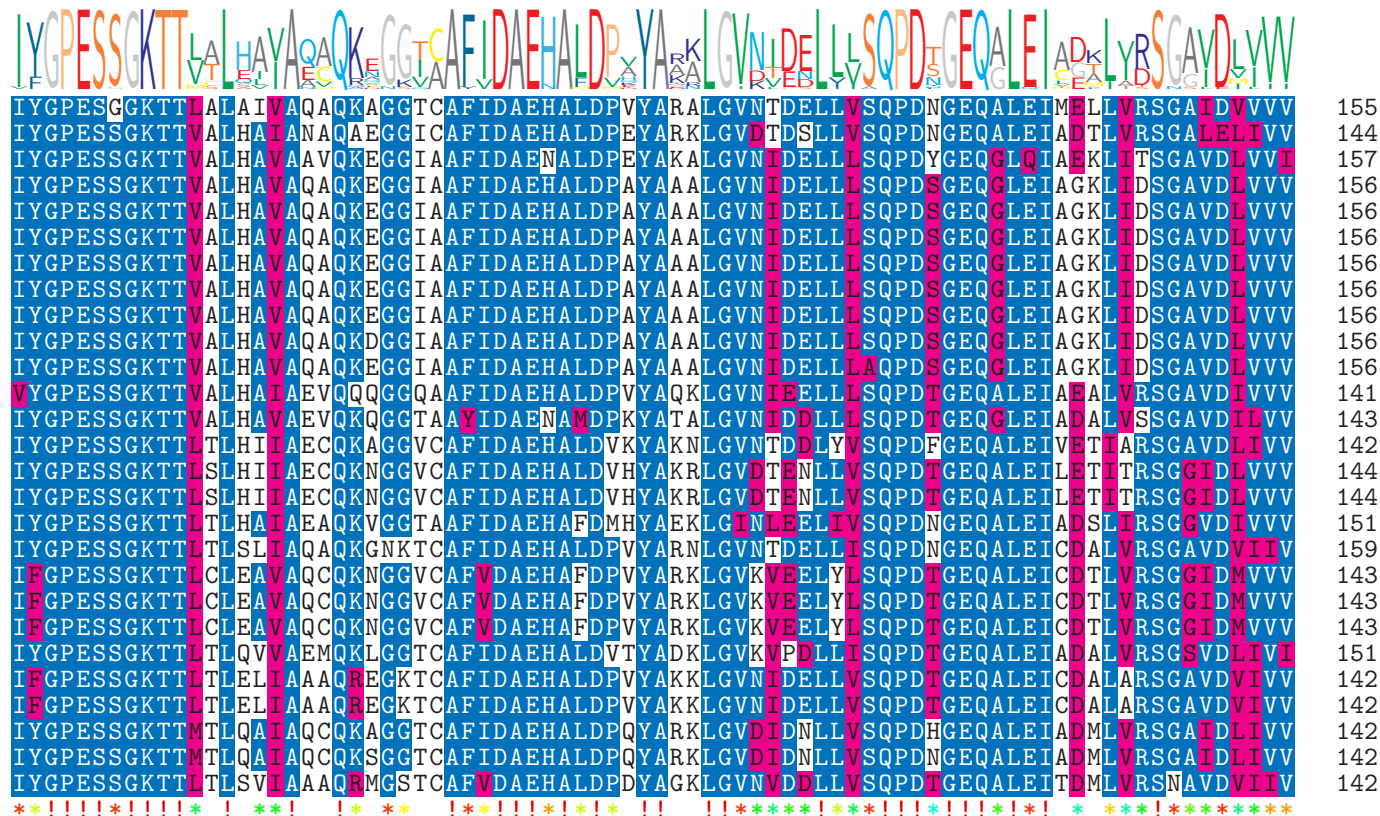
logo

```

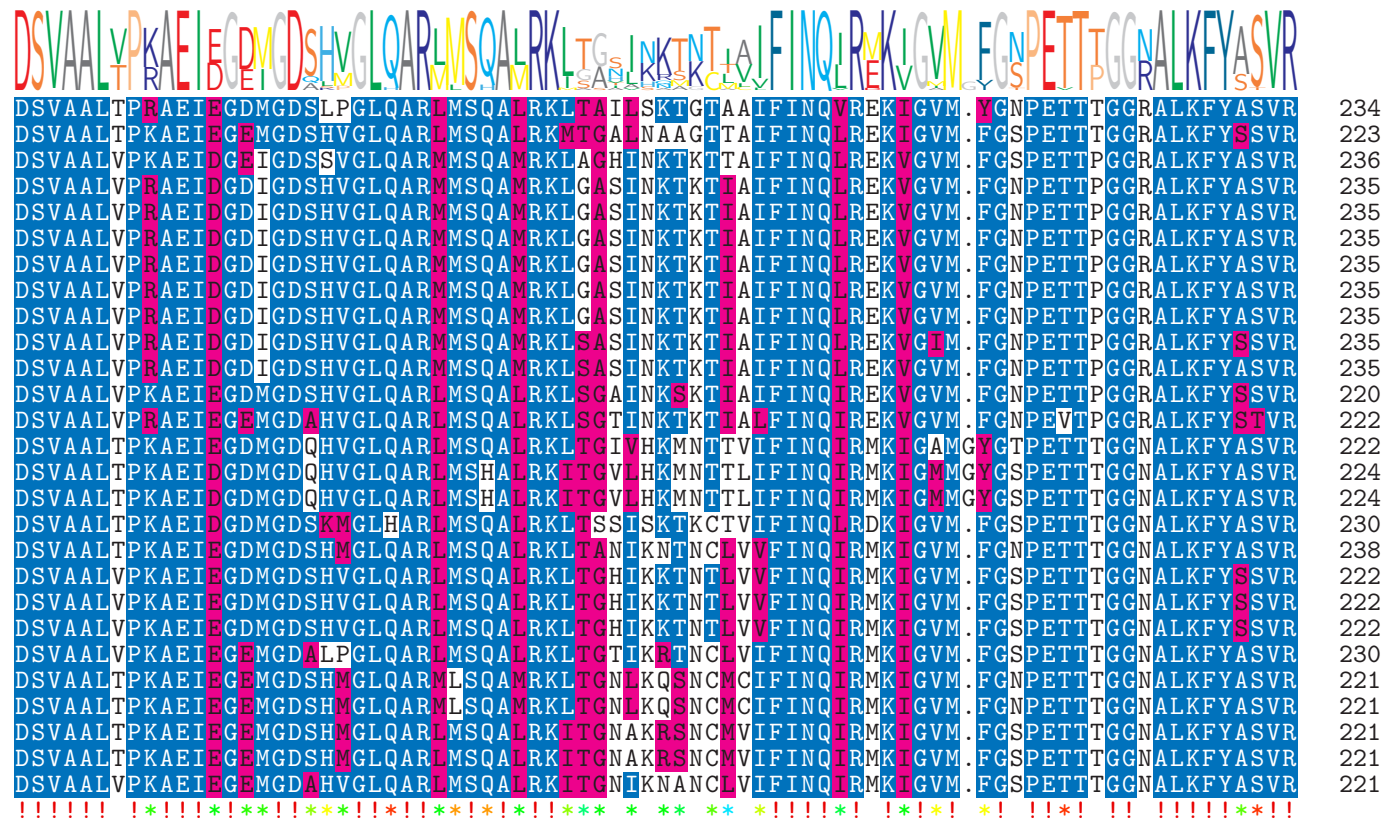
NTDB id 1313 DR RS12030 WP 010888966.1
NTDB id 29694 TIA2EST36 RS05005 WP 002515492.1
NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
NTDB id 228 SPD RS09265 WP 001085462.1
NTDB id 194 SPR RS08825 WP 001085462.1
NTDB id 159 SP RS09750 WP 001085462.1
NTDB id 499 SM12261 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 115 BSU 16940 NP 389576.2
NTDB id 625 LCA RS02525 WP 011374196.1
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 1427 RS RS02760 WP 011000510.1
NTDB id 1165 A1552VC RS01565 WP 000344154.1
NTDB id 1142 GTF74 RS11550 WP 000344154.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1205 PSJM300 05545 AFN77183.1

```

consensus



NTDB id 1313 DR RS12030 WP 010888966.1
NTDB id 29694 TIA2EST36 RS05005 WP 002515492.1
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 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 115 BSU 16940 NP 389576.2
NTDB id 625 LCA RS02525 WP 011374196.1
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 RA0C 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 1427 RS RS02760 WP 011000510.1
NTDB id 1165 A1552VC RS01565 WP 000344154.1
NTDB id 1142 GTF74 RS11550 WP 000344154.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus



logo

NTDB id 1313 DR RS12030 WP 010888966.1	LDVRRKIGQ...PTKVGND	AVANTV	KIKTKV	KNKVA	APPFKE	VELAL	IVYGK	GFDQLS	DLVGL	AADM	DI	IKK	AGS	FYSY	GDE	310	
NTDB id 29694 TIA2EST36 RS05005 WP 002515492.1	LDVRRVETLKDGS....EMVGN	RTRVKV	AKN	KVAPPF	KQAE	FDIL	YGQG	GISRE	GLID	MGVDCG	II	TKS	GS	WFSY	NNEQ	298	
NTDB id 600 KW2 RS01765 WP 011675413.1	LDVRGSTKIEEGS.GDNKTQ	IGKITK	IKVV	KNKVAPPF	KVAL	VDIM	FGEG	ISSTG	ELLN	IAVEEG	II	KKSG	AWF	AYN	DEK	315	
NTDB id 269 KZH43 RS08665 WP 001085462.1	LDVRGNTQIKGTG.DQKETN	VGKETK	IKVV	KNKVAPPF	KEAV	VEIM	YGEG	ISKTG	ELLK	IASDL	DI	IKK	AGW	YSY	KDEK	314	
NTDB id 228 SPD RS09265 WP 001085462.1	LDVRGNTQIKGTG.DQKETN	VGKETK	IKVV	KNKVAPPF	KEAV	VEIM	YGEG	ISKTG	ELLK	IASDL	DI	IKK	AGW	YSY	KDEK	314	
NTDB id 194 SPR RS08825 WP 001085462.1	LDVRGNTQIKGTG.DQKETN	VGKETK	IKVV	KNKVAPPF	KEAV	VEIM	YGEG	ISKTG	ELLK	IASDL	DI	IKK	AGW	YSY	KDEK	314	
NTDB id 159 SP RS09750 WP 001085462.1	LDVRGNTQIKGTG.DQKETN	VGKETK	IKVV	KNKVAPPF	KEAV	VEIM	YGEG	ISKTG	ELLK	IASDL	DI	IKK	AGW	YSY	KDEK	314	
NTDB id 499 SM12261 RS08315 WP 078228268.1	LDVRGSTQIKGTG.DQKDTN	VGKETK	IKVV	KNKVAPPF	KEAF	VEIM	YGEG	ISKTG	ELLK	IASDL	DI	IKK	AGW	YSY	KDEK	314	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	LDVRGSTQIKGTG.DQKDTN	VGKETK	IKVV	KNKVAPPF	KEAF	VEIM	YGEG	ISKTG	ELLK	IASDL	DI	IKK	AGW	YSY	KDEK	314	
NTDB id 408 SMU RS09530 WP 002262392.1	LDVRGNTQIKGTG.EQKDSN	IGKETK	IKVV	KNKVAPPF	KEAF	VEIM	YIGEG	ISRTG	ELVK	IASDL	GI	IKK	AGW	YSY	NGEK	314	
NTDB id 453 Spy49 1753c ACI62003.1	LDVRGTTQIKGTG.DQKDS	IGKETK	IKVV	KNKVAPPF	KVAE	VEIM	YGEG	ISRTG	ELVK	IASDL	DI	IKK	AGW	F	SYNGEK	314	
NTDB id 115 BSU 16940 NP 389576.2	LEVRRRAEQLKQGN....DVM	GNKTK	IKVV	KNKVAPP	FR	TAE	VDIM	YGEG	ISKEG	EITD	LGTEL	DI	VQK	SG	WYSY	EEEE	295
NTDB id 625 LCA RS02525 WP 011374196.1	LEVRRRAETIKNGT....DM	IGNRA	RIK	VVKNKVAPPF	KVAE	VDIM	YGG	GISRT	GELV	DMAVE	KDI	INK	SG	WYSY	GSE	297	
NTDB id 1245 Cj1673c YP 002345041.1	LDVRRKVAT....L.KQNE	EPIC	NRVK	VKVVK	NKVAPP	FRQA	EFDV	MFGE	GLSRE	GELID	YGVK	LDI	VDK	SG	AWF	SYKDKK	297
NTDB id 1214 NCTC11637 00359 SQJ03206.1	IDIRRIIAA....L.KQNE	QHIG	NRAK	AKVV	KNKVAPP	FRQA	EFDI	MFGE	GLSKE	GEIT	DYGV	KLDI	VDK	SG	AWL	SYQDKK	299
NTDB id 1211 C694 RS00795 WP 000963128.1	IDIRRIAS....L.KQNE	QHIG	NRAK	AKVV	KNKVAPP	FRQA	EFDI	MFGE	GLSKE	GEIT	DYGV	KLDI	VDK	SG	AWL	SYQDKK	299
NTDB id 1334 RAOC RS04870 WP 004918236.1	IDIRRLSLDTGKIKDKS	GEVIG	NRTK	VKVVK	NKVAPP	FKSA	EFDI	MYGEG	VSKV	GEILD	VATDL	DI	IQK	SG	WFSY	QDTK	310
NTDB id 1389 A4U84 RS07560 WP 021112712.1	LDIRRCGV....V.KDG	DEIIG	SETK	VKVVK	NKVAPP	FRVQ	FDIM	YGEG	ISRM	NELL	LILAE	ANGFI	KKSG	AWF	SYDGT	K	313
NTDB id 1130 NGFG RS03960 WP 003688695.1	LDIRRTGS....I.KKG	EEVLG	NETRV	KVI	KNKVAPP	FRQA	EFDI	LYGEG	ISWEG	ELID	IGVK	NDI	INK	SG	AWYSY	NGAK	297
NTDB id 1124 NGFG RS03960 WP 003688695.1	LDIRRTGS....I.KKG	EEVLG	NETRV	KVI	KNKVAPP	FRQA	EFDI	LYGEG	ISWEG	ELID	IGVK	NDI	INK	SG	AWYSY	NGAK	297
NTDB id 1123 OK783 RS03845 WP 003688695.1	LDIRRTGS....I.KKG	EEVLG	NETRV	KVI	KNKVAPP	FRQA	EFDI	LYGEG	ISWEG	ELID	IGVK	NDI	INK	SG	AWYSY	NGAK	297
NTDB id 1427 RS RS02760 WP 011000510.1	LDIRRIGS....I.KKG	DEVVGN	ETKV	VKVVK	NKVAPP	FR	EAFID	ILYG	AGVSR	EGET	IDLG	VEAK	VVEK	SG	AWYSY	NGER	305
NTDB id 1165 A1552VC RS01565 WP 000344154.1	LDIRRTGA....I.KEG	EEVVG	NETRI	KVVKN	IAAP	PFKE	ANTQ	IMYG	QGFNR	EGET	IDLG	VKHK	MVEK	SG	AWYSY	NGDK	296
NTDB id 1142 GTF74 RS11550 WP 000344154.1	LDIRRTGA....I.KEG	EEVVG	NETRI	KVVKN	IAAP	PFKE	ANTQ	IMYG	QGFNR	EGET	IDLG	VKHK	MVEK	SG	AWYSY	NGDK	296
NTDB id 1022 ACIAD RS06390 WP 004925639.1	LDIRRIQ...V.KEG	DEIIG	SETK	VKVVK	NKMAPP	FR	EAFIQ	ILYK	KG	TNQLGEL	VDLAV	QQN	IVQK	AG	AWYSY	QGNK	296
NTDB id 1074 ABD1 RS10195 WP 000344167.1	LDIRRIQ...V.KEG	DEIVG	SETK	VKVVK	NKMAPP	FR	EAFIQ	ILYK	KG	TNQLGEL	VDLAV	QQD	IVQK	AG	AWYSY	QGNK	296
NTDB id 1205 PSJM300 05545 AFN77183.1	LDIRRTGA....V.KEG	DEVVGS	ETRV	KVVKN	NKVAPP	FRQA	EFDI	ILYK	GIYR	NGEL	IDLG	VQQG	LVEK	SG	AWY	AYKGS	296
consensus	***!*	*	*	*	*****!*****!*****!*****!*	*	*****!*****!*****!*****!*										

consensus

