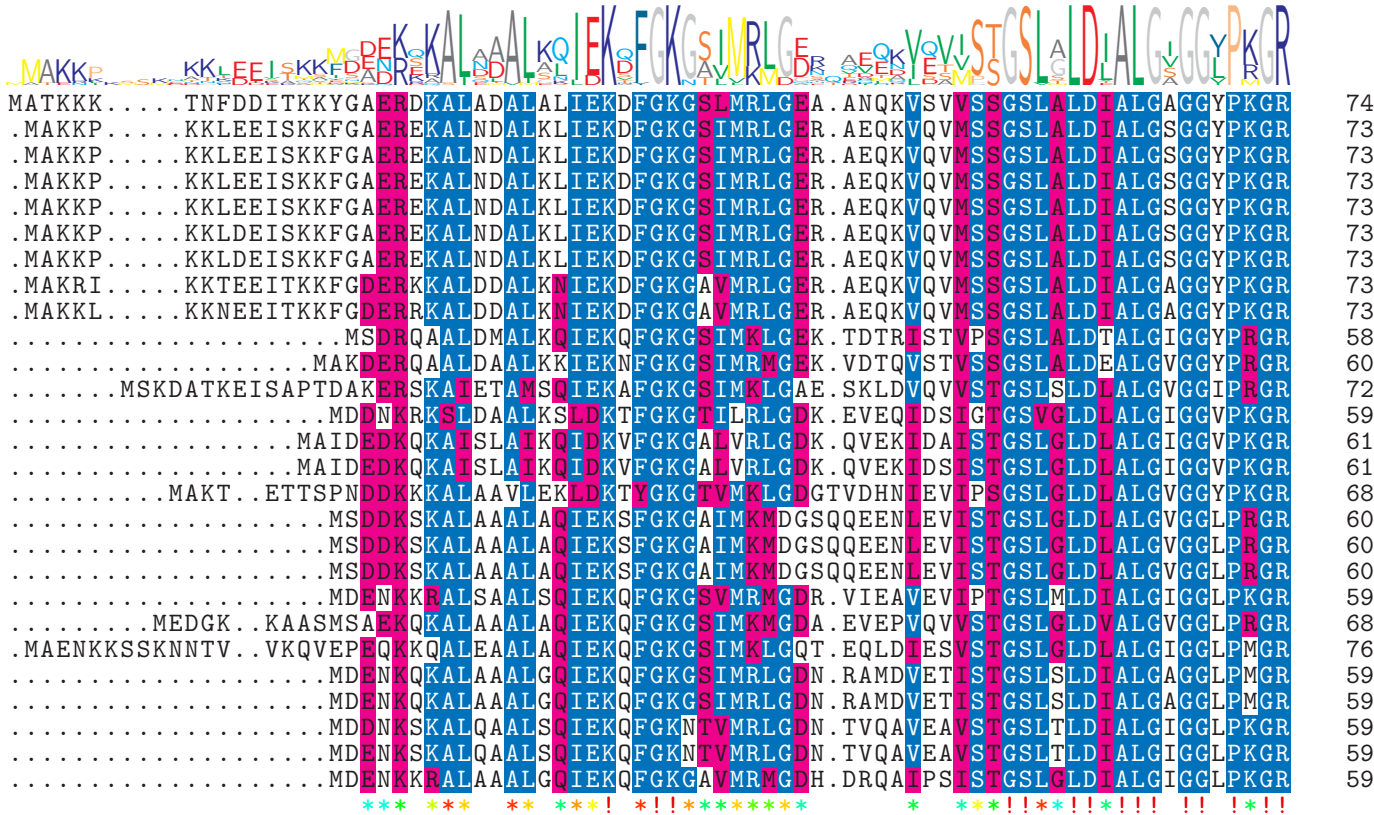


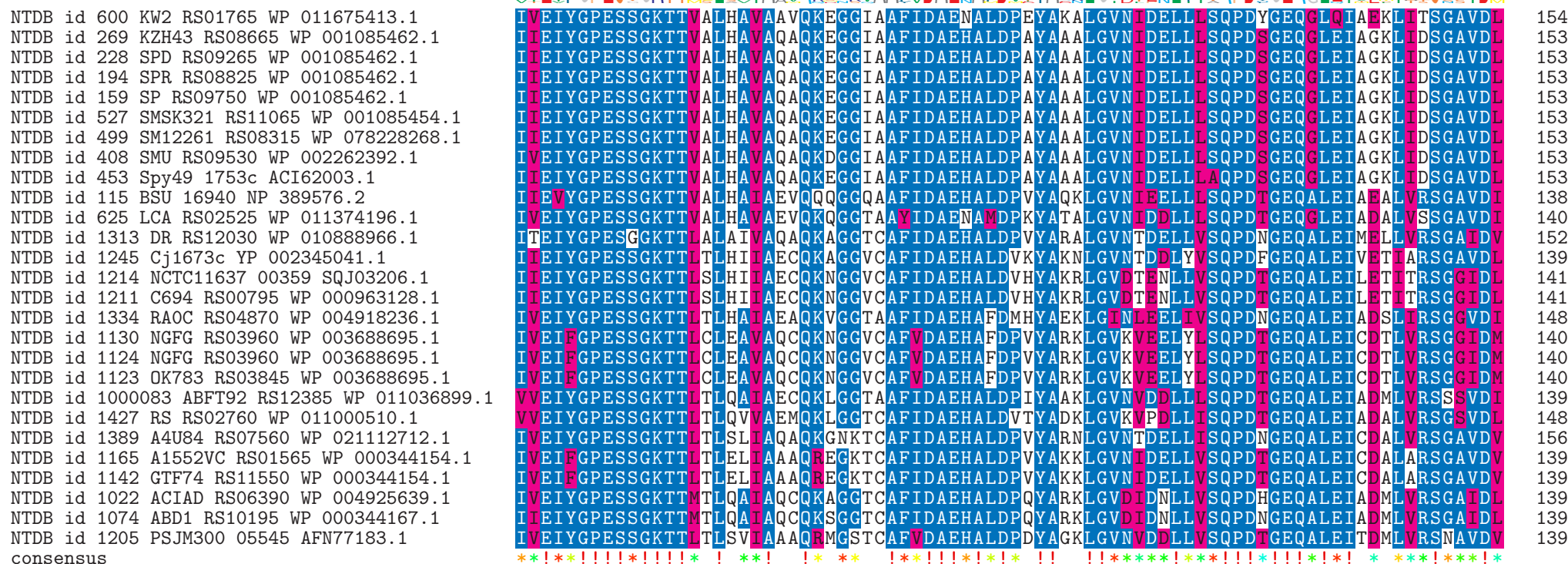
logo

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 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 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 1130 NGFG RS03960 WP 003688695.1
NTDB id 1124 NGFG RS03960 WP 003688695.1
NTDB id 1123 OK783 RS03845 WP 003688695.1
NTDB id 1000083 ABFT92 RS12385 WP 011036899.1
NTDB id 1427 RS RS02760 WP 011000510.1
NTDB id 1389 A4U84 RS07560 WP 021112712.1
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



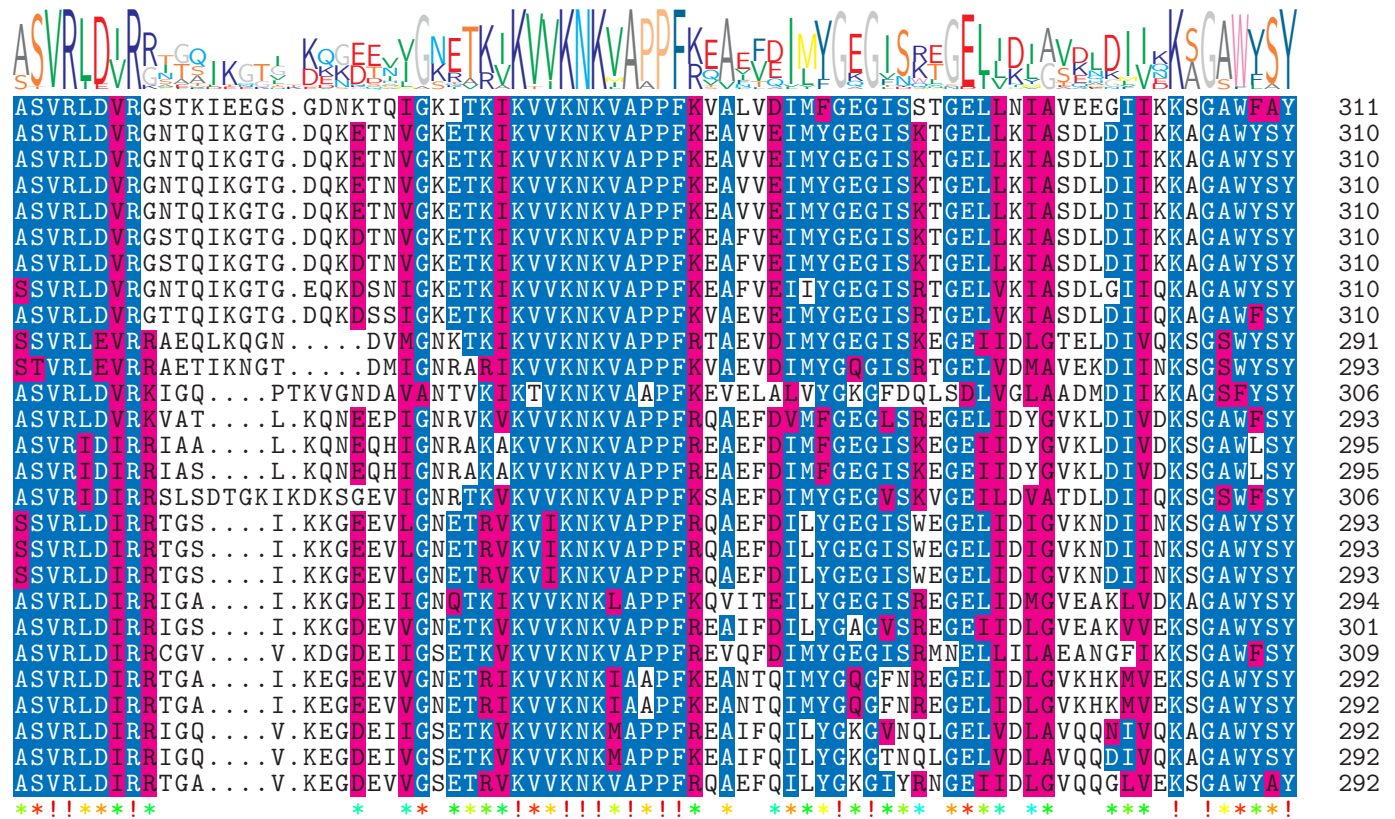
logo




```

NTDB id 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 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 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 1130 NGFG RS03960 WP 003688695.1
NTDB id 1124 NGFG RS03960 WP 003688695.1
NTDB id 1123 OK783 RS03845 WP 003688695.1
NTDB id 1000083 ABFT92 RS12385 WP 011036899.1
NTDB id 1427 RS RS02760 WP 011000510.1
NTDB id 1389 A4U84 RS07560 WP 021112712.1
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 600 KW2 RS01765 WP 011675413.1	NDEKIGQGA	EKA	KNYLKE	HQDV	FEID	HKVRAAH	GLDD	SEVAETEEETT	ASKTKAKAKKEEK	AVETEEIELELED	...	387					
NTDB id 269 KZH43 RS08665 WP 001085462.1	KDEKIGQGS	ENAKK	YLAEH	PEIF	DEID	KQVRSKF	GLID	GEEVSEQD	TENKKDE	...	PKKEEA..VNEEVPLDLGDELEI	384					
NTDB id 228 SPD RS09265 WP 001085462.1	KDEKIGQGS	ENAKK	YLAEH	PEIF	DEID	KQVRSKF	GLID	GEEVSEQD	TENKKDE	...	PKKEEA..VNEEVPLDLGDELEI	384					
NTDB id 194 SPR RS08825 WP 001085462.1	KDEKIGQGS	ENAKK	YLAEH	PEIF	DEID	KQVRSKF	GLID	GEEVSEQD	TENKKDE	...	PKKEEA..VNEEVPLDLGDELEI	384					
NTDB id 159 SP RS09750 WP 001085462.1	KDEKIGQGS	ENAKK	YLAEH	PEIF	DEID	KQVRSKF	GLID	GEEVSEQD	TENKKDE	...	PKKEEA..VNEEVPLDLGDELEI	384					
NTDB id 527 SMSK321 RS11065 WP 001085454.1	KDEKIGQGS	ENAKK	YLADN	PEVFAE	IDH	QVRVQF	GLID	GEEAAE	...	SKKDE...VAQVDS..VNEEVTLDLGDELEI	380						
NTDB id 499 SM12261 RS08315 WP 078228268.1	KDEKIGQGS	ENAKK	YLADN	PEIF	DEID	HQVRVQF	GLID	GEEIAE	...	SKKDE...AAQVDS..VNEEVTLDLGDELEI	380						
NTDB id 408 SMU RS09530 WP 002262392.1	NGEKIGQGS	ENAKK	FLADN	PEIF	DDID	HKVRVQY	GLIE	EDNTEEKQSSKEK	...	ETDEK..ADKNLVLELDDTIEL	381						
NTDB id 453 Spy49 1753c ACI62003.1	NGEKIGQGS	ENAKR	YLADH	PPQLF	DEID	RKVRVKF	GLLE	EESEESAMAVASE	...	E.....TDDLALDLNGIEI	376						
NTDB id 115 BSU 16940 NP 389576.2	EEERL	GQGR	ENAK	QFLK	ENK	DI	MLMI	QEQIREHY	GLDN	NGVVQQAEETQEEL	EFE.E.....	348					
NTDB id 625 LCA RS02525 WP 011374196.1	GSERIGQGR	ENAK	NYLAD	HEDVE	DEV	RLKVR	AAYGIS	DVPEEDLPTTEDE	QI	NILPDDST	EE.....	355					
NTDB id 1313 DR RS12030 WP 010888966.1	GDERIGQG	KEKTI	AYIA	ERP	MEQE	IRDR	MAAIR	AGNAGEAPALAP	AAPAAPEAAEA	.....	.....	363					
NTDB id 1245 Cj1673c YP 002345041.1	KDKKL	GQGR	ENSK	AF	LKEN	PEI	AD	EITKAI	QNSM	GIEGMI	SGSEDDEGEE.....	343					
NTDB id 1214 NCTC11637 00359 SQJ03206.1	QDKKL	GQGR	ENAK	ALLK	EDK	AL	AD	EITL	KIKES	IGSNEEI	MPLPDEPLEEME.....	347					
NTDB id 1211 C694 RS00795 WP 000963128.1	QDKKL	GQGR	ENAK	ALLK	EDK	AL	AD	EITL	KIKES	IGSNEEI	MPLPDEPLEEME.....	347					
NTDB id 1334 RAOC RS04870 WP 004918236.1	QDTKL	GQGR	DTV	KELI	KDN	PEL	AEE	LEAKI	REKL	QAK	.....	343					
NTDB id 1130 NGFG RS03960 WP 003688695.1	NGAKIGQG	KDNVR	VWL	KEN	PEIS	DEI	DAK	IRALN	GVEMHI	...	TEGTQDET	DGERP.....EE.....	348				
NTDB id 1124 NGFG RS03960 WP 003688695.1	NGAKIGQG	KDNVR	VWL	KEN	PEIS	DEI	DAK	IRALN	GVEMHI	...	TEGTQDET	DGERP.....EE.....	348				
NTDB id 1123 OK783 RS03845 WP 003688695.1	NGAKIGQG	KDNVR	VWL	KEN	PEIS	DEI	DAK	IRALN	GVEMHI	...	TEGTQDET	DGERP.....EE.....	348				
NTDB id 1000083 ABFT92 RS12385 WP 011036899.1	GDERIGQG	KDNARG	YL	RDN	PQVA	IKLE	AELRE	KFQPAEAP	...	REAGET	ESE.....	343					
NTDB id 1427 RS RS02760 WP 011000510.1	NGERIGQGR	DN	CRE	FL	RENA	E	LAR	EI	ENK	VREHL	GVTPMG	AVTLAEEVEED.....	352				
NTDB id 1389 A4U84 RS07560 WP 021112712.1	DGT	KIGQG	KNN	AVK	WL	KEN	PEI	AD	KLE	QEI	RNTLAS	NPNS....VLKATASDSN	DES	DVE..EFSEEEL.....	372		
NTDB id 1165 A1552VC RS01565 WP 000344154.1	NGDKIGQG	KAN	ACK	YL	KEN	PEI	AKT	LD	DKKL	REML	LN	PENM....QLIAETSSA	ADD	VEFG..AVPEEF.....	354		
NTDB id 1142 GTF74 RS11550 WP 000344154.1	NGDKIGQG	KAN	ACK	YL	KEN	PEI	AKT	LD	DKKL	REML	LN	PENM....QLIAETSSA	ADD	VEFG..AVPEEF.....	354		
NTDB id 1022 ACIAD RS06390 WP 004925639.1	QGNKIGQG	KNN	VIR	Y	FEEN	NQIA	E	E	IERN	I	REQL	LT	TGTN....GAVQ.I	EDEE	EPDLL...LES.....	349	
NTDB id 1074 ABD1 RS10195 WP 000344167.1	QGNKIGQG	KNN	VIR	Y	FEEN	NQIA	E	E	IERN	I	REQL	LT	TGTN....GAVQ.I	EDEE	EPDLL...LES.....	349	
NTDB id 1205 PSJM300 05545 AFN77183.1	KGS	KIGQG	KAN	AK	YLE	EN	PEI	GQ	E	I	EQ	IRAK	LL	VT	SAN....TKATPVAED	LADADI.....	347
consensus	**!!!!***** ** ***** ***** ** *																

logo

NTDB id 600 KW2 RS01765 WP 011675413.1	E.IEE	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 408 SMU RS09530 WP 002262392.1	ED..	383
NTDB id 453 Spy49 1753c ACI62003.1	ED..	378
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 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 1000083 ABFT92 RS12385 WP 011036899.1	....	343
NTDB id 1427 RS RS02760 WP 011000510.1	....	352
NTDB id 1389 A4U84 RS07560 WP 021112712.1	....	372
NTDB id 1165 A1552VC RS01565 WP 000344154.1	....	354
NTDB id 1142 GTF74 RS11550 WP 000344154.1	....	354
NTDB id 1022 ACIAD RS06390 WP 004925639.1	....	349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	....	349
NTDB id 1205 PSJM300 05545 AFN77183.1	....	347
consensus		

-  non conserved
-  similar
-  ≥ 50% conserved