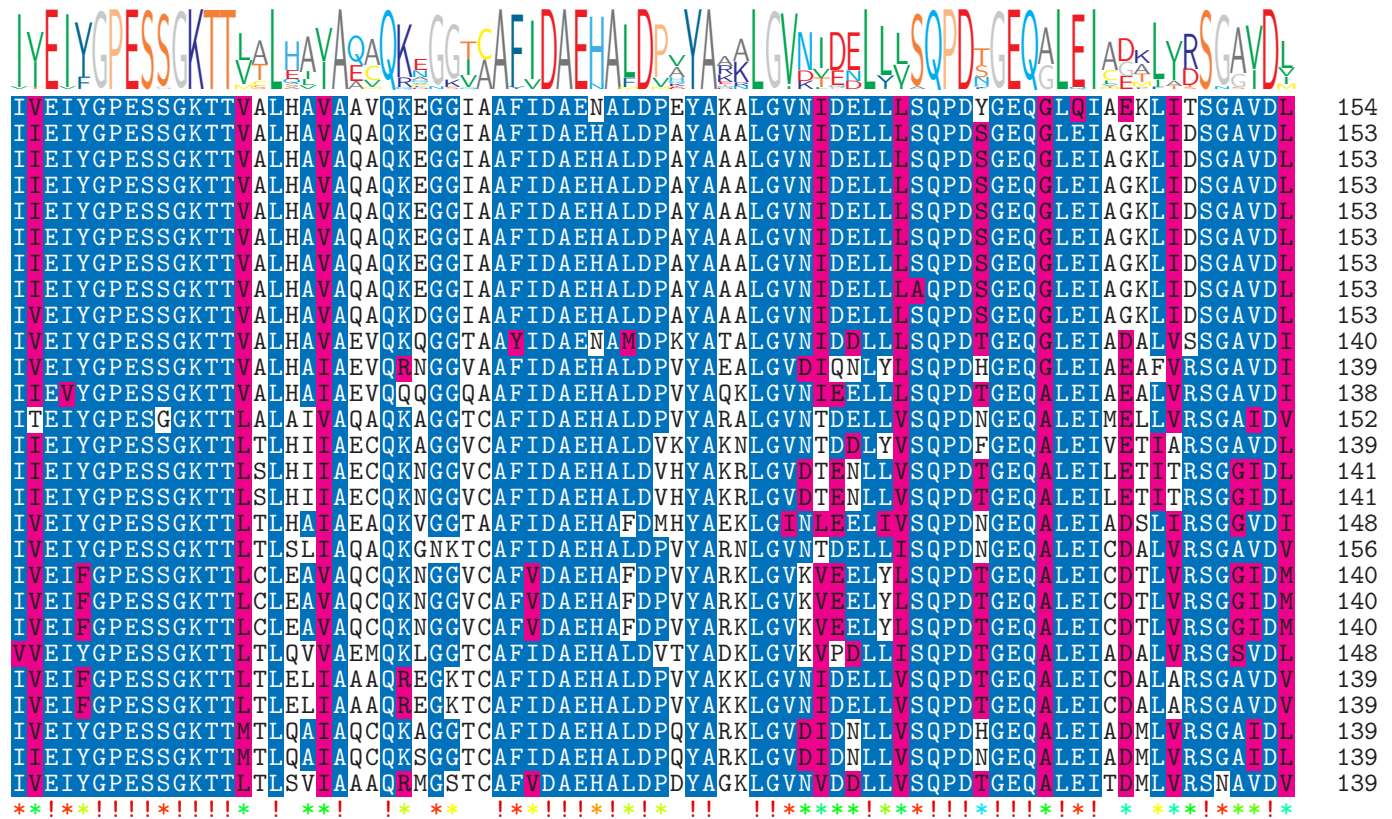


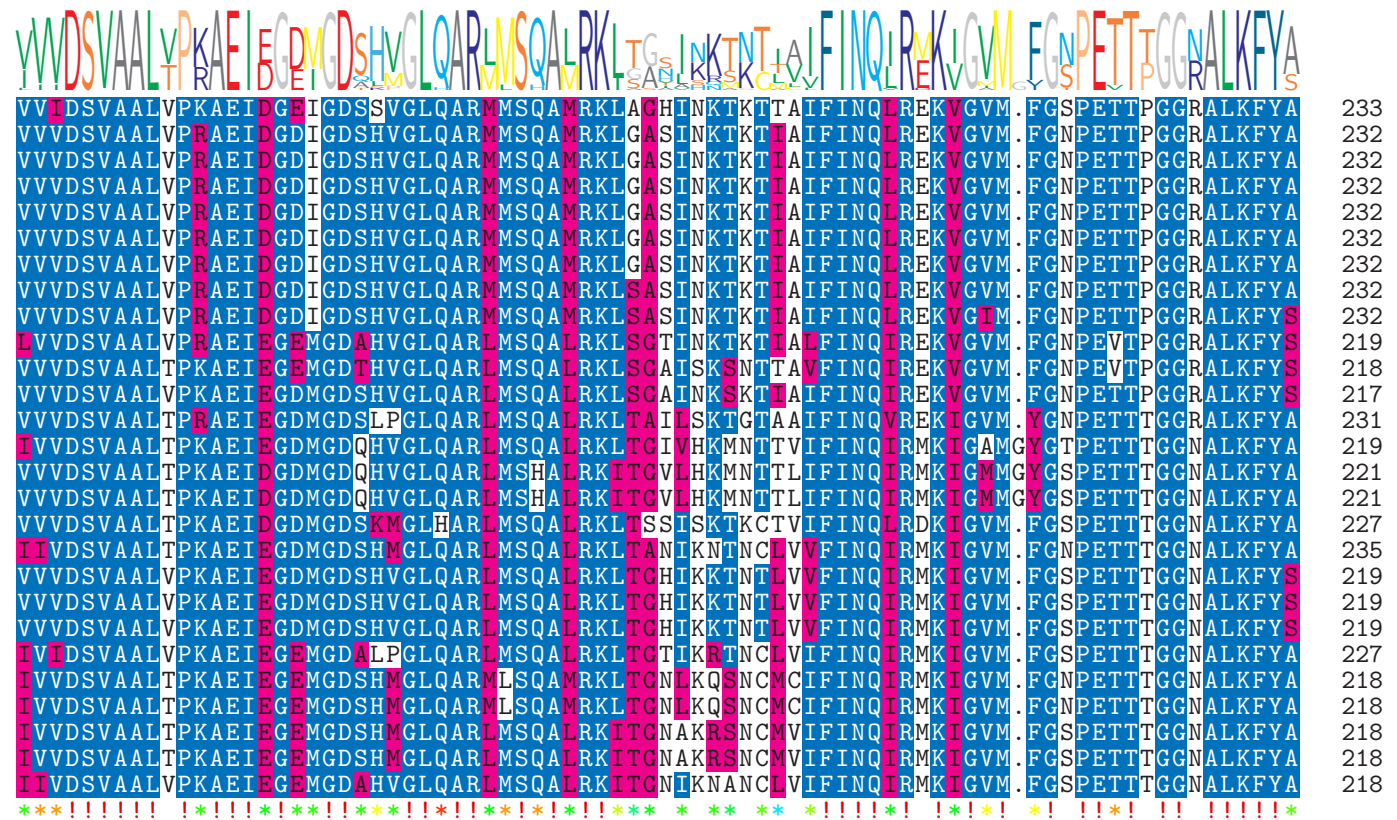
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NTDB id 600 KW2 RS01765 WP 011675413.1	MATK.....KKTNFDDITKKYGA	ERDKALADALALIEKD	FGKGSIMRLGEA	.ANQKVS	VSSGSLALD	I	ALGAGGY	PKGR	74	
NTDB id 269 KZH43 RS08665 WP 001085462.1	.MAK.....KPKKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQV	MSSGSLALD	I	ALSGGY	PKGR	73	
NTDB id 228 SPD RS09265 WP 001085462.1	.MAK.....KPKKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQV	MSSGSLALD	I	ALSGGY	PKGR	73	
NTDB id 194 SPR RS08825 WP 001085462.1	.MAK.....KPKKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQV	MSSGSLALD	I	ALSGGY	PKGR	73	
NTDB id 159 SP RS09750 WP 001085462.1	.MAK.....KPKKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQV	MSSGSLALD	I	ALSGGY	PKGR	73	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	.MAK.....KPKKLDEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQV	MSSGSLALD	I	ALSGGY	PKGR	73	
NTDB id 499 SM12261 RS08315 WP 078228268.1	.MAK.....KPKKLDEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQV	MSSGSLALD	I	ALSGGY	PKGR	73	
NTDB id 453 Spy49 1753c ACI62003.1	.MAK.....KLKKNEEITKKFGD	ERRKALDDALKNIEKD	FGKGAVMRLGER	.AEQKVQV	MSSGSLALD	I	ALGAGGY	PKGR	73	
NTDB id 408 SMU RS09530 WP 002262392.1	.MAK.....RIKKTEEITKKFGD	ERRKALDDALKNIEKD	FGKGAVMRLGER	.AEQKVQV	MSSGSLALD	I	ALGAGGY	PKGR	73	
NTDB id 625 LCA RS02525 WP 011374196.1	MAKD	ERQAALDAALKKIEKN	FGKGSIMRMGEK	.VDTQVST	VSSGSLALDE	A	LGVGGY	PKGR	60	
NTDB id 1113563 SXYL RS07860 WP 047172461.1	MDN	DRQKALDTV	IKNMEKS	SFGKGAVMKL	GDN.EARKVSS	VSSGS	VTL	DNALGVGGY	PKGR	59
NTDB id 115 BSU 16940 NP 389576.2	MS	DRQAALDMALKQIEKQ	FGKGSIMKLGEK	.TDTRI	STVPSGSLALD	I	ALGIGGY	PKGR	58	
NTDB id 1313 DR RS12030 WP 010888966.1	MSKDATKEISAPTD	AKERSKAT	IETAMSQIEKA	FGKGSIMKLGA	E.SKLDVQV	VSTGSLSLD	I	ALGVGGI	PKGR	72
NTDB id 1245 Cj1673c YP 002345041.1	MDDN	KRKSLDAALKSLDKT	FGKGTILRLGDK	.EVEQIDS	IGTGSVGLDL	I	ALGIGGV	PKGR	59	
NTDB id 1211 C694 RS00795 WP 000963128.1	MAIDE	DKQKATISLA	IKQIDKVF	FGKGALVRLGDK	.QVEKIDS	ISTGSLGLDL	I	ALGIGGV	PKGR	61
NTDB id 1214 NCTC11637 00359 SQJ03206.1	MAIDE	DKQKATISLA	IKQIDKVF	FGKGALVRLGDK	.QVEKIDA	ISTGSLGLDL	I	ALGIGGV	PKGR	61
NTDB id 1334 RAOC RS04870 WP 004918236.1	MAKT..ETTSPND	DKKKALA	AAVLEKLDKTYGKGTVMKLG	DGTVDHNI	EVIPSGSLGLDL	I	ALGVGGY	PKGR	68	
NTDB id 1389 A4U84 RS07560 WP 021112712.1	.MAENKKSSKNNTV..VKQVEPEQ	KKQALEAALA	QIEKQFGKGSIMKL	QGT.EQLD	IESVSTGSLGLDL	I	ALGIGGL	PMGR	76	
NTDB id 1130 NGFG RS03960 WP 003688695.1	MSD	DKSKALAAALA	QIEKSFGKGAIMKMDGSQ	QEENLEVI	ISTGSLGLDL	I	ALGVGGL	PKGR	60	
NTDB id 1124 NGFG RS03960 WP 003688695.1	MSD	DKSKALAAALA	QIEKSFGKGAIMKMDGSQ	QEENLEVI	ISTGSLGLDL	I	ALGVGGL	PKGR	60	
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NTDB id 1427 RS RS02760 WP 011000510.1	.MEDG.....K..KAASMSA	EKQKALAAALA	QIEKQFGKGSIMKMGDA	.EVEPVQV	VSTGSLGLD	I	ALGVGGL	PKGR	68	
NTDB id 1165 A1552VC RS01565 WP 000344154.1	MDEN	KQKALAAALG	QIEKQFGKGSIMRLGDN	.RAMDVET	ISTGSLSLD	I	ALGAGGL	PMGR	59	
NTDB id 1142 GTF74 RS11550 WP 000344154.1	MDEN	KQKALAAALG	QIEKQFGKGSIMRLGDN	.RAMDVET	ISTGSLSLD	I	ALGAGGL	PMGR	59	
NTDB id 1022 ACIAD RS06390 WP 004925639.1	MDDN	KSKALQAALS	QIEKQFGKNTVMRLGDN	.TVQAVEA	VSTGSLTLD	I	ALGIGGL	PKGR	59	
NTDB id 1074 ABD1 RS10195 WP 000344167.1	MDEN	KSKALQAALS	QIEKQFGKNTVMRLGDN	.TVQAVEA	VSTGSLTLD	I	ALGIGGL	PKGR	59	
NTDB id 1205 PSJM300 05545 AFN77183.1	MDEN	KKRALAAALG	QIEKQFGKGAVMRMGDH	.DRQAIPS	ISTGSLGLD	I	ALGIGGL	PKGR	59	
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
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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 625 LCA RS02525 WP 011374196.1
NTDB id 1113563 SKYL RS07860 WP 047172461.1
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NTDB id 1211 C694 RS00795 WP 000963128.1
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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
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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 1205 PSJM300 05545 AFN77183.1
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NTDB id 1205 PSJM300 05545 AFN77183.1
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NTDB id 600 KW2 RS01765 WP 011675413.1	SVRLDVRGSTKIEEGS.GDNKTQ	IGKITKIKVVKNKVAPPFKEA	VALVDIMFGEGISSTGELIN	IAVEEGI	IKKSGAWFAYN	312
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NTDB id 228 SPD RS09265 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKETN	VGKETKIKVVKNKVAPPFKEA	AVVEIMYEGEGISKTGELL	KIASDL	DIKKAGAWYSYK	311
NTDB id 194 SPR RS08825 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKETN	VGKETKIKVVKNKVAPPFKEA	AVVEIMYEGEGISKTGELL	KIASDL	DIKKAGAWYSYK	311
NTDB id 159 SP RS09750 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKETN	VGKETKIKVVKNKVAPPFKEA	AVVEIMYEGEGISKTGELL	KIASDL	DIKKAGAWYSYK	311
NTDB id 527 SMSK321 RS11065 WP 001085454.1	SVRLDVRGSTQIKGTG.DQKDTN	VGKETKIKVVKNKVAPPFKEA	FAVEIMYEGEGISKTGELL	KIASDL	DIKKAGAWYSYK	311
NTDB id 499 SM12261 RS08315 WP 078228268.1	SVRLDVRGSTQIKGTG.DQKDTN	VGKETKIKVVKNKVAPPFKEA	FAVEIMYEGEGISKTGELL	KIASDL	DIKKAGAWYSYK	311
NTDB id 453 Spy49 1753c ACI62003.1	SVRLDVRGTTQIKGTG.DQKDS	IGKETKIKVVKNKVAPPFKEA	VEIMYEGEGISRTGELV	KIASDL	DIKKAGAWFSYN	311
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NTDB id 625 LCA RS02525 WP 011374196.1	TVRLEVRRRAETIKNGT.....	DMIGNRARIKVVKNKVAPPF	KVAEVDIMYGGISRTGELV	DMAVEK	DIINKSGSWYSYG	294
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NTDB id 115 BSU 16940 NP 389576.2	SVRLEVRRAEQLKQGN.....	DVMGNKTKIKVVKNKVAPPF	RTAEVDIMYEGEGISKEGE	IIDLGTE	LDIVQKSGSWYSYE	292
NTDB id 1313 DR RS12030 WP 010888966.1	SVRLDVRKIGQ....PTKVGND	AVANTVKIKTVKNKVAAPF	KEVELALVYGKGFQDLS	DLVGLA	ADMDIINKAGSFYSYG	307
NTDB id 1245 Cj1673c YP 002345041.1	SVRLDVRKVAT....L.KQNE	EPIGNRVKVVKNKVAPPFR	QAEFDVMFGEGLSREGEL	IDYGVK	LDIVDKSGAWFSYK	294
NTDB id 1211 C694 RS00795 WP 000963128.1	SVRIDIRRIAS....L.KQNE	EQHIGNRAKAKVVKNKVAPPF	REAEFDIMFGEGISKEGE	IIDYGV	KLDIVDKSGAWLSYQ	296
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NTDB id 1334 RAOC RS04870 WP 004918236.1	SVRIDIRRLSDTGKIKDKSGE	VIGNRTKVVKNKVAPPFKS	AEFDIMYEGEGVSKVGE	ILDVAT	DLDIQKSGSWFSYQ	307
NTDB id 1389 A4U84 RS07560 WP 021112712.1	SVRLDIRRCGV....V.KDG	DEIIGSETKVVKNKVAPPF	REVQFDIMYEGEGISRM	NELLILA	EANGFIKKSGAWFSYD	310
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NTDB id 1427 RS RS02760 WP 011000510.1	SVRLDIRRIGS....I.KKG	DEVVGNETKVVKNKVAPPF	REAEFDILYGAGVSREGE	IIDL	GVKAKVVEKSGAWYSYN	302
NTDB id 1165 A1552VC RS01565 WP 000344154.1	SVRLDIRRTGA....I.KEG	EEVVGNETRIKVVKNKIA	APFKEANTQIMYGGF	NREGEL	IDLGVKHKMVEKSGAWYSYN	293
NTDB id 1142 GTF74 RS11550 WP 000344154.1	SVRLDIRRTGA....I.KEG	EEVVGNETRIKVVKNKIA	APFKEANTQIMYGGF	NREGEL	IDLGVKHKMVEKSGAWYSYN	293
NTDB id 1022 ACIAD RS06390 WP 004925639.1	SVRLDIRRIGQ....V.KEG	DEIIGSETKVVKNKMAPPF	REAEFIQILYGKGVN	QLGELV	DLAVQQNIVQKAGAWYSYQ	293
NTDB id 1074 ABD1 RS10195 WP 000344167.1	SVRLDIRRIGQ....V.KEG	DEIIGSETKVVKNKMAPPF	KEAIFQILYGKGTN	QLGELV	DLAVQQDIVQKAGAWYSYQ	293
NTDB id 1205 PSJM300 05545 AFN77183.1	SVRLDIRRTGA....V.KEG	DEVVGSETRKKVVKNKVAPPF	RQAEFIQILYGKGIY	RNGE	IIDLGVQQGLVEKSGAWAYK	293
consensus	*!!**!*~	~	*~	*****!*****!~	*~	*****!~!*****

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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
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NTDB id 408 SMU RS09530 WP 002262392.1
NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 1113563 SXYL RS07860 WP 047172461.1
NTDB id 115 BSU 16940 NP 389576.2
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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
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NTDB id 269 KZH43 RS08665 WP 001085462.1	IEE	388	
NTDB id 228 SPD RS09265 WP 001085462.1	IEE	388	
NTDB id 194 SPR RS08825 WP 001085462.1	IEE	388	
NTDB id 159 SP RS09750 WP 001085462.1	IEE	388	
NTDB id 527 SMSK321 RS11065 WP 001085454.1	IEE	384	
NTDB id 499 SM12261 RS08315 WP 078228268.1	IEE	384	
NTDB id 453 Spy49 1753c ACI62003.1	D..	378	
NTDB id 408 SMU RS09530 WP 002262392.1	D..	383	
NTDB id 625 LCA RS02525 WP 011374196.1	...	355	
NTDB id 1113563 SXYL RS07860 WP 047172461.1	...	349	
NTDB id 115 BSU 16940 NP 389576.2	...	348	
NTDB id 1313 DR RS12030 WP 010888966.1	...	363	
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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			

- X non conserved
- X similar
- X ≥ 50% conserved