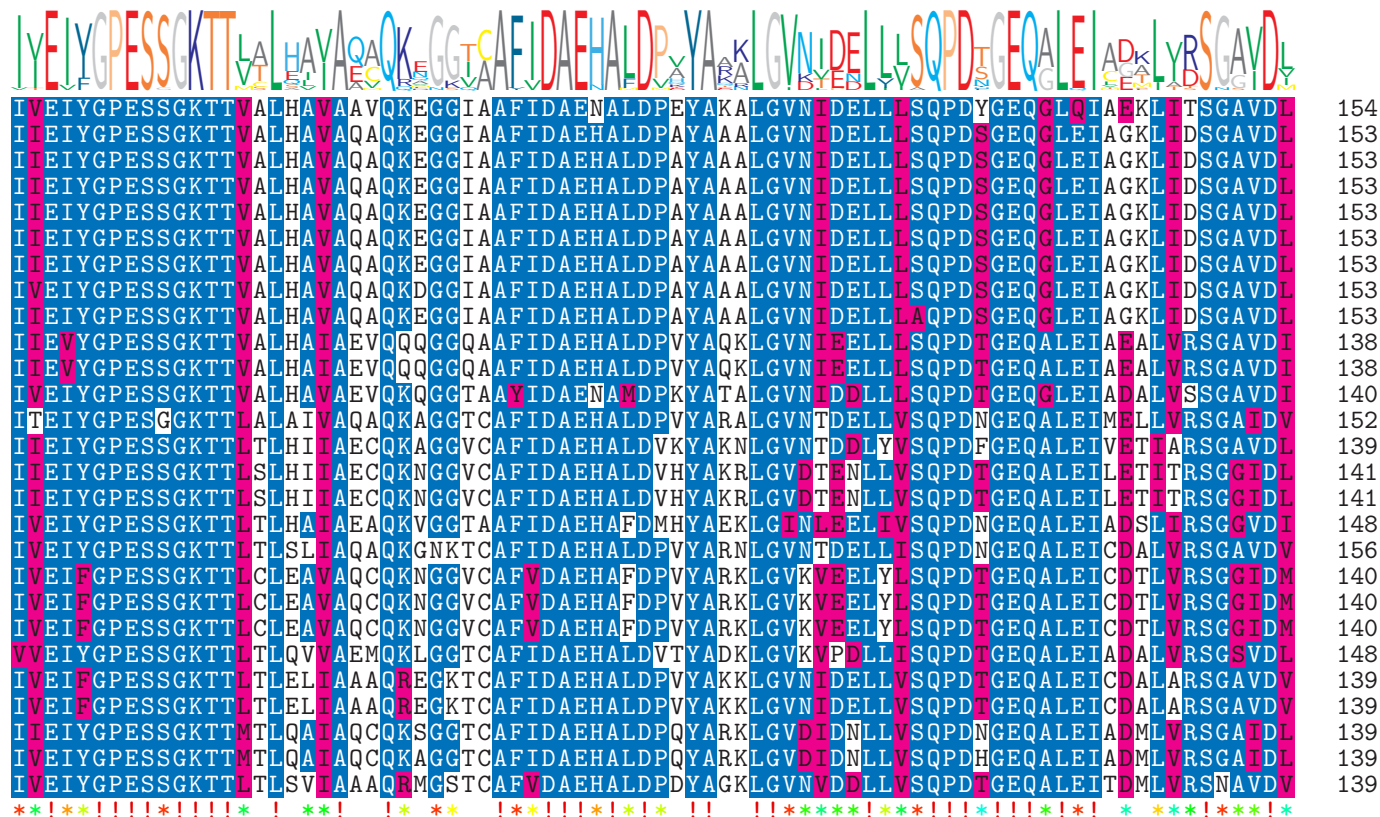


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NTDB id 600 KW2 RS01765 WP 011675413.1	MATKK.....KTNFDDITKKYGA	ERDKALADALALIEKD	FGKGSIMRLGEA	.ANQKVS	VSSGSLALD	I	ALGAGGY	PKGR	74
NTDB id 269 KZH43 RS08665 WP 001085462.1	.MAKK.....PKKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 228 SPD RS09265 WP 001085462.1	.MAKK.....PKKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 194 SPR RS08825 WP 001085462.1	.MAKK.....PKKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 159 SP RS09750 WP 001085462.1	.MAKK.....PKKLEEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 527 SMSK321 RS11065 WP 001085454.1	.MAKK.....PKKLDEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 499 SM12261 RS08315 WP 078228268.1	.MAKK.....PKKLDEISKKFGA	EREKALNDALKLIEKD	FGKGSIMRLGER	.AEQKVQVM	SSGSLALD	I	ALGSGGY	PKGR	73
NTDB id 408 SMU RS09530 WP 002262392.1	.MAKR.....IKKTEEITKKFGD	ERRKALDDALKNIEKD	FGKGAVMRLGER	.AEQKVQVM	SSGSLALD	I	ALGAGGY	PKGR	73
NTDB id 453 Spy49 1753c ACI62003.1	.MAKK.....LKKNEEITKKFGD	ERRKALDDALKNIEKD	FGKGAVMRLGER	.AEQKVQVM	SSGSLALD	I	ALGAGGY	PKGR	73
NTDB id 184881 A8017 RS08790 WP 003245789.1	MS	DRQAALDMALKQIEKQ	FGKGSIMKLGEK	.TDTRISTV	PSGSLALD	T	ALGIGGY	PRGR	58
NTDB id 115 BSU 16940 NP 389576.2	MS	DRQAALDMALKQIEKQ	FGKGSIMKLGEK	.TDTRISTV	PSGSLALD	T	ALGIGGY	PRGR	58
NTDB id 625 LCA RS02525 WP 011374196.1	MAKD	ERQAALDAALKKIEKN	FGKGSIMRMGEK	.VDTQVSTV	SSGSLALD	E	ALGVGGY	PRGR	60
NTDB id 1313 DR RS12030 WP 010888966.1	MSKDATKEISAPTD	AKERSKATETAMSQIEK	AFGKGSIMKLGA	E.SKLDVQV	VSTGSLSLD	L	ALGVGGI	PRGR	72
NTDB id 1245 Cj1673c YP 002345041.1	MDDN	KRKSLDAALKSLDKT	FGKGTILRLGDK	.EVEQIDS	IGTGSVGLD	L	ALGIGGV	PKGR	59
NTDB id 1211 C694 RS00795 WP 000963128.1	MAIDE	DKQKATISLAIKQID	KVFGKGALVRLGDK	.QVEKIDS	ISTGSLGLD	L	ALGIGGV	PKGR	61
NTDB id 1214 NCTC11637 00359 SQJ03206.1	MAIDE	DKQKATISLAIKQID	KVFGKGALVRLGDK	.QVEKIDA	ISTGSLGLD	L	ALGIGGV	PKGR	61
NTDB id 1334 RAOC RS04870 WP 004918236.1	MAKT..ETTSPND	DKKKALAAVLEKLDKT	YGKGTVMKLG	DGTVDHNI	EVIPSGSLGLD	L	ALGVGGY	PKGR	68
NTDB id 1389 A4U84 RS07560 WP 021112712.1	.MAENKKSSKNNTV..VKQVEPEQ	KKQALEAALAQIEKQ	FGKGSIMKLQGT	.EQLDIESV	STGSLGLD	L	ALGIGGL	PMGR	76
NTDB id 1130 NGFG RS03960 WP 003688695.1	MSD	DKSKALAAALAQIEKS	FGKGAIMKMDGSQ	QEENLEV	ISTGSLGLD	L	ALGVGGL	PRGR	60
NTDB id 1124 NGFG RS03960 WP 003688695.1	MSD	DKSKALAAALAQIEKS	FGKGAIMKMDGSQ	QEENLEV	ISTGSLGLD	L	ALGVGGL	PRGR	60
NTDB id 1123 OK783 RS03845 WP 003688695.1	MSD	DKSKALAAALAQIEKS	FGKGAIMKMDGSQ	QEENLEV	ISTGSLGLD	L	ALGVGGL	PRGR	60
NTDB id 1427 RS RS02760 WP 011000510.1	.MEDG.....K..KAASMSA	EKQKALAAALAQIEKQ	FGKGSIMKMGDA	.EVEPVQV	VSTGSLGLD	V	ALGVGGL	PRGR	68
NTDB id 1165 A1552VC RS01565 WP 000344154.1	MDEN	KQKALAAALGQIEKQ	FGKGSIMRLGDN	.RAMDVET	ISTGSLSLD	I	ALGAGGL	PMGR	59
NTDB id 1142 GTF74 RS11550 WP 000344154.1	MDEN	KQKALAAALGQIEKQ	FGKGSIMRLGDN	.RAMDVET	ISTGSLSLD	I	ALGAGGL	PMGR	59
NTDB id 1074 ABD1 RS10195 WP 000344167.1	MDEN	KSALQAALSQIEKQ	FGKNTVMRLGDN	.TVQAVEA	VSTGSLTLD	I	ALGIGGL	PKGR	59
NTDB id 1022 ACIAD RS06390 WP 004925639.1	MDDN	KSALQAALSQIEKQ	FGKNTVMRLGDN	.TVQAVEA	VSTGSLTLD	I	ALGIGGL	PKGR	59
NTDB id 1205 PSJM300 05545 AFN77183.1	MDEN	KKRALAAALGQIEKQ	FGKGAVMRMGDH	.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
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
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NTDB id 1130 NGFG RS03960 WP 003688695.1
NTDB id 1124 NGFG RS03960 WP 003688695.1
NTDB id 1123 OK783 RS03845 WP 003688695.1
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NTDB id 1142 GTF74 RS11550 WP 000344154.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1205 PSJM300 05545 AFN77183.1
consensus



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NTDB id 600 KW2 RS01765 WP 011675413.1
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NTDB id 1389 A4U84 RS07560 WP 021112712.1
NTDB id 1130 NGFG RS03960 WP 003688695.1
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NTDB id 600 KW2 RS01765 WP 011675413.1
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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 1074 ABD1 RS10195 WP 000344167.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1205 PSJM300 05545 AFN77183.1
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NTDB id 600 KW2 RS01765 WP 011675413.1	DEKIGQGA	EKAKNYLKEHQDV	DEIDHKVRAAHG	LDDSEVAETEEETT	ASKTKAKAKKEEK	AVETEEIELELED		387
NTDB id 269 KZH43 RS08665 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTENKK	DE....PKKEEA..	VNEEVPLDLGDELEIE		385
NTDB id 228 SPD RS09265 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTENKK	DE....PKKEEA..	VNEEVPLDLGDELEIE		385
NTDB id 194 SPR RS08825 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTENKK	DE....PKKEEA..	VNEEVPLDLGDELEIE		385
NTDB id 159 SP RS09750 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTENKK	DE....PKKEEA..	VNEEVPLDLGDELEIE		385
NTDB id 527 SMSK321 RS11065 WP 001085454.1	DEKIGQGS	ENAKKYLAADNPEV	FAEIDHQVRVQFGL	IDGEEAAE....SKK	DE....VAQVDS..	VNEEVTLDLGDELEIE		381
NTDB id 499 SM12261 RS08315 WP 078228268.1	DEKIGQGS	ENAKKYLAADNPEIF	DEIDHQVRVQFGL	IDGEEIAE....SKK	DE....AAQVDS..	VNEEVTLDLGDELEIE		381
NTDB id 408 SMU RS09530 WP 002262392.1	GEKIGQGS	ENAKKFLADNPEIF	DDIDHKVVRVQYGL	IEEDNTEEKQSSKEK	ETDEK..	ADKNLVLELDDTIELE		382
NTDB id 453 Spy49 1753c ACI62003.1	GEKIGQGS	ENAKRYLADHPQLF	DEIDRKVRVKFGL	LEESEEEESAMAVASE	E.....	TDDLALDLDNNGIEIE		377
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NTDB id 115 BSU 16940 NP 389576.2	EEERLGQG	RENAKQFLKENKDIM	LMIQEQIREHYGL	DNNGVVQQAEETQEEL	.EFE.E.....			348
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NTDB id 1313 DR RS12030 WP 010888966.1	DERIGQG	KEKTIAYIAERP	EMEQEIRDRVMAA	IRAGNAGEAPALAP	APAAPEAAEA			363
NTDB id 1245 Cj1673c YP 002345041.1	DKKLGQG	RENSKAFLENPEIA	DEITKAIQNSMG	IEGMI....SGSE	DE..GEE.....			343
NTDB id 1211 C694 RS00795 WP 000963128.1	DKKLGQG	RENAKALLKEDKAL	ADEITLKIKESIG	SNEEI....MPLP	DEP..LEEME	.....		347
NTDB id 1214 NCTC11637 00359 SQJ03206.1	DKKLGQG	RENAKALLKEDKAL	ADEITLKIKESIG	SNEEI....MPLP	DEP..LEEME	.....		347
NTDB id 1334 RAOC RS04870 WP 004918236.1	DTKLGQGR	DTVKELIKDNPELA	EELAKIREKLQAK	.....				343
NTDB id 1389 A4U84 RS07560 WP 021112712.1	GTKIGQG	KNNAVKWLKENPEI	ADKLEQEIRNTLAS	NPNS....VLKAT	ASDSNDESD..	VEEFSEEEL	.....	372
NTDB id 1130 NGFG RS03960 WP 003688695.1	GAKIGQG	KDNVRVWLKENPEI	SDIDAIRALNGVEM	HI....TEGTQDET	D.....GERPEE	.....		348
NTDB id 1124 NGFG RS03960 WP 003688695.1	GAKIGQG	KDNVRVWLKENPEI	SDIDAIRALNGVEM	HI....TEGTQDET	D.....GERPEE	.....		348
NTDB id 1123 OK783 RS03845 WP 003688695.1	GAKIGQG	KDNVRVWLKENPEI	SDIDAIRALNGVEM	HI....TEGTQDET	D.....GERPEE	.....		348
NTDB id 1427 RS RS02760 WP 011000510.1	GERIGQGR	DNCREFLRENAEL	AREIENKVREHLG	VTPMG....AV.TL	AEEVEED	.....		352
NTDB id 1165 A1552VC RS01565 WP 000344154.1	GDKIGQG	KANACKYLLKENPEI	AKTLDKKLREMLLN	PENM....QLIAET	SSAADDVE..	FGAVPEEF	.....	354
NTDB id 1142 GTF74 RS11550 WP 000344154.1	GDKIGQG	KANACKYLLKENPEI	AKTLDKKLREMLLN	PENM....QLIAET	SSAADDVE..	FGAVPEEF	.....	354
NTDB id 1074 ABD1 RS10195 WP 000344167.1	GNKIGQG	KNNVIRYFEENN	QIAEEIERNIREQL	LLTTGTN....GAV	Q.I.EDEEEPD	LLES	.....	349
NTDB id 1022 ACIAD RS06390 WP 004925639.1	GNKIGQG	KNNVIRYLEENP	QISTEIEAVIREQL	LLTKASD....QTAA	.HDETEEEP	D....LLES	.....	349
NTDB id 1205 PSJM300 05545 AFN77183.1	GSKIGQG	KANAACKYLEENPEI	IGQIEEQIRAKLL	VTSAN....TKATP	VAAEDLADAD	I.....		347
consensus	***!!!	*****	**	*****	*****	**	**	

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		IEE	
NTDB id 600	KW2 RS01765 WP 011675413.1	...	387
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 408	SMU RS09530 WP 002262392.1	D..	383
NTDB id 453	Spy49 1753c ACI62003.1	D..	378
NTDB id 184881	A8017 RS08790 WP 003245789.1	...	348
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 1211	C694 RS00795 WP 000963128.1	...	347
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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 1427	RS RS02760 WP 011000510.1	...	352
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NTDB id 1142	GTF74 RS11550 WP 000344154.1	...	354
NTDB id 1074	ABD1 RS10195 WP 000344167.1	...	349
NTDB id 1022	ACIAD RS06390 WP 004925639.1	...	349
NTDB id 1205	PSJM300 05545 AFN77183.1	...	347
consensus			

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