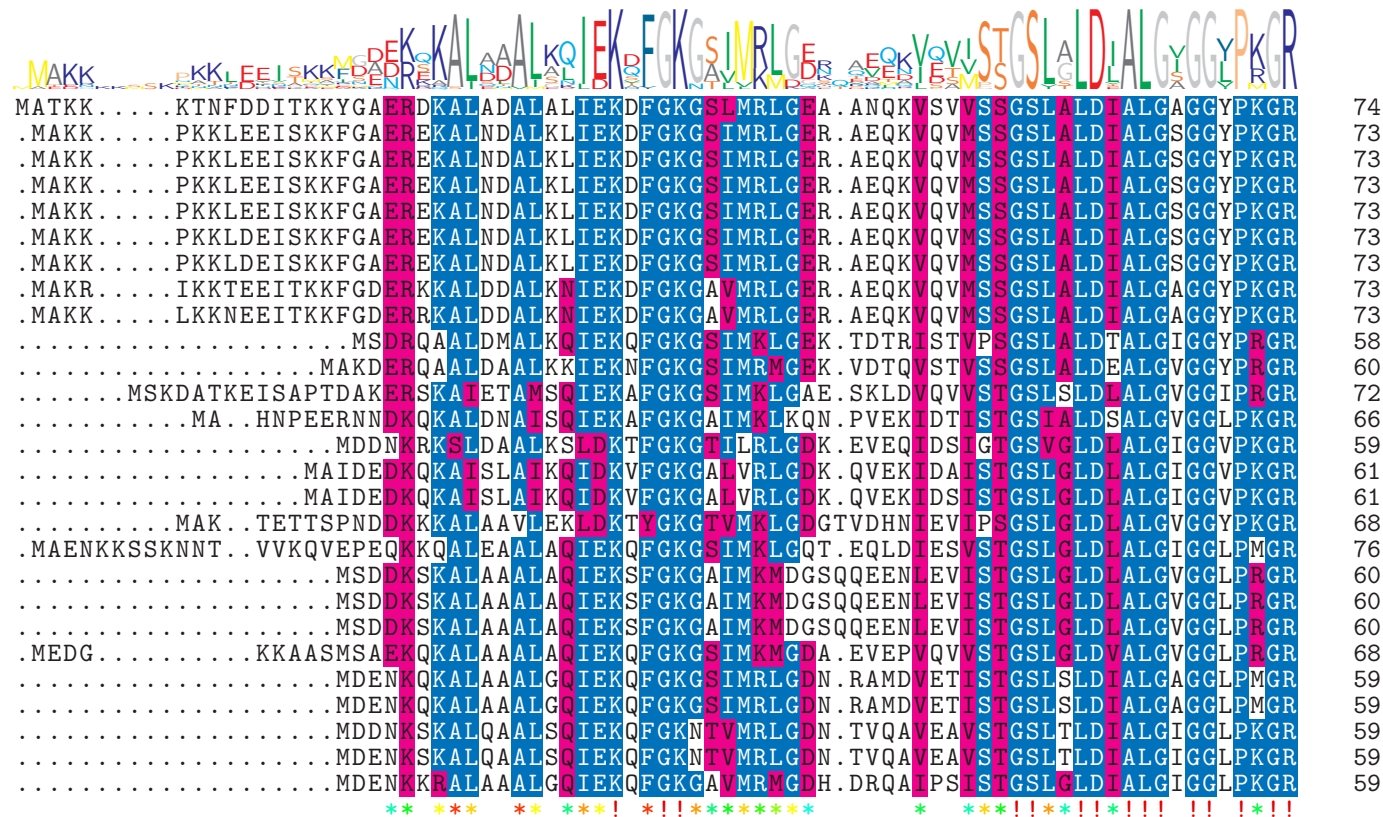


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NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
NTDB id 228 SPD RS09265 WP 001085462.1
NTDB id 194 SPR RS08825 WP 001085462.1
NTDB id 159 SP RS09750 WP 001085462.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 527 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 1313 DR RS12030 WP 010888966.1
NTDB id 423272 GZ064 RS04405 WP 017532324.1
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
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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
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NTDB id 600 KW2 RS01765 WP 011675413.1	SVRLDVRGSTKIEEGS.GDNKTQIGK	ITKIKVVKNKVAPPFKVALVDIMFGEGISSTGELINIAVEEGI	IKKSGAWFAYN	312		
NTDB id 269 KZH43 RS08665 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKETN	VGKETKIKVVKNKVAPPFKEAVVEIMYGE	GISKGTGELLKIASDLDIKKAGAWYSYK	311		
NTDB id 228 SPD RS09265 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKETN	VGKETKIKVVKNKVAPPFKEAVVEIMYGE	GISKGTGELLKIASDLDIKKAGAWYSYK	311		
NTDB id 194 SPR RS08825 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKETN	VGKETKIKVVKNKVAPPFKEAVVEIMYGE	GISKGTGELLKIASDLDIKKAGAWYSYK	311		
NTDB id 159 SP RS09750 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKETN	VGKETKIKVVKNKVAPPFKEAVVEIMYGE	GISKGTGELLKIASDLDIKKAGAWYSYK	311		
NTDB id 499 SM12261 RS08315 WP 078228268.1	SVRLDVRGSTQIKGTG.DQKDTN	VGKETKIKVVKNKVAPPFKEAFVEIMYGE	GISKGTGELLKIASDLDIKKAGAWYSYK	311		
NTDB id 527 SMSK321 RS11065 WP 001085454.1	SVRLDVRGSTQIKGTG.DQKDTN	VGKETKIKVVKNKVAPPFKEAFVEIMYGE	GISKGTGELLKIASDLDIKKAGAWYSYK	311		
NTDB id 408 SMU RS09530 WP 002262392.1	SVRLDVRGNTQIKGTG.EQKDSN	IGKETKIKVVKNKVAPPFKEAFVEIITYGEGISRTGELVKIASDLGI	IQKAGAWYSYN	311		
NTDB id 453 Spy49 1753c ACI62003.1	SVRLDVRGTTQIKGTG.DQKDSS	IGKETKIKVVKNKVAPPFKEAFVEIMYGE	GISRTGELVKIASDLDIQKAGAWFSYN	311		
NTDB id 115 BSU 16940 NP 389576.2	SVRLEVRRAEQLKQGN.....DVMGNKTKIKVVKNKVAPPFRTAEVDIMYGE	GISKEGEIIDLGTELD	DIVQKSGSWYSYE	292		
NTDB id 625 LCA RS02525 WP 011374196.1	TVRLEVRRAEITIKNGT.....DMIGNRARIKVVKNKVAPPFKVAEVDIMYGGISRTGELVDMAVEKDI	INKSGSWYSYG	294			
NTDB id 1313 DR RS12030 WP 010888966.1	SVRLDVRKIGQ....PTKVGNDAAVANTVKIKTVKNKVAAPFKEVELALVYGKGFQDLS	DLVGLAADMDI	IKKAGSFYSYG	307		
NTDB id 423272 GZ064 RS04405 WP 017532324.1	SIRLDIRKIGA....I.KDKENITGN	ETRVKVVKNKVAPPFREAKFDIMYN	NEGISKLGEIIDIGAKLGVLEKAGAYSYN	300		
NTDB id 1245 Cj1673c YP 002345041.1	SVRLDVRKVAT....L.KQNEEP	IGNRVKVVKNKVAPPFRQAEFDVMFGEGLSREGELIDYGVKLD	DIVDKSGAWFSYK	294		
NTDB id 1214 NCTC11637 00359 SQJ03206.1	SVRIDIRRIAA....L.KQNEQH	IGNRAKAKVVKNKVAPPFREA	EFDIMFGEGISKEGEIIDYGVKLD	DIVDKSGAWLSYQ	296	
NTDB id 1211 C694 RS00795 WP 000963128.1	SVRIDIRRIAS....L.KQNEQH	IGNRAKAKVVKNKVAPPFREA	EFDIMFGEGISKEGEIIDYGVKLD	DIVDKSGAWLSYQ	296	
NTDB id 1334 RAOC RS04870 WP 004918236.1	SVRIDIRRLSDTGKIKDKSGEV	IGNRTKVVVKNKVAPPFKSAEFDIMYGE	GVSKVGEILDVATDLDI	IQKSGSWFSYQ	307	
NTDB id 1389 A4U84 RS07560 WP 021112712.1	SVRLDIRRCGV....V.KDGD	EIIGSETKVVVKNKVAPPFREVQFDIMYGE	GISRNMNELLILAEANGFI	IKKSGAWFSYD	310	
NTDB id 1130 NGFG RS03960 WP 003688695.1	SVRLDIRRTGS....I.KKGE	EVLGN	ETRVKVIKNKVAPPFRQAEFDILYGE	GISWEGELIDIGVKN	DIINKSGAWYSYN	294
NTDB id 1124 NGFG RS03960 WP 003688695.1	SVRLDIRRTGS....I.KKGE	EVLGN	ETRVKVIKNKVAPPFRQAEFDILYGE	GISWEGELIDIGVKN	DIINKSGAWYSYN	294
NTDB id 1123 OK783 RS03845 WP 003688695.1	SVRLDIRRTGS....I.KKGE	EVLGN	ETRVKVIKNKVAPPFRQAEFDILYGE	GISWEGELIDIGVKN	DIINKSGAWYSYN	294
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NTDB id 1165 A1552VC RS01565 WP 000344154.1	SVRLDIRRTGA....I.KEG	EEVVGNETRIKVVKNKIAAPFKEANTQIMYGGGFNREGELIDLGVKHKM	VVEKSGAWYSYN	293		
NTDB id 1142 GTF74 RS11550 WP 000344154.1	SVRLDIRRTGA....I.KEG	EEVVGNETRIKVVKNKIAAPFKEANTQIMYGGGFNREGELIDLGVKHKM	VVEKSGAWYSYN	293		
NTDB id 1022 ACIAD RS06390 WP 004925639.1	SVRLDIRRIGQ....V.KEG	DEIVGSETKVVVKNKMAPPFREAIFQILY	GKGVNQLGELVDLAVQQN	IVQKAGAWYSYQ	293	
NTDB id 1074 ABD1 RS10195 WP 000344167.1	SVRLDIRRIGQ....V.KEG	DEIVGSETKVVVKNKMAPPFKEAIFQILY	GKGTNQLGELVDLAVQQD	IVQKAGAWYSYQ	293	
NTDB id 1205 PSJM300 05545 AFN77183.1	SVRLDIRRTGA....V.KEG	DEVVGS	ETRVKVVKNKVAPPFRQAEFQILY	GKGIYRNGEIIDLG	VQQGLVEKSGAWAYK	293
consensus	***!***!*	* ** *****!*****!*****	*****!***** ***** *	*** ! !*****!		

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NTDB id 600 KW2 RS01765 WP 011675413.1	DEKIGQGA	EKAKNYLKEHQDV	DEIDHKVRAAHG	LDDSEVAETEEETT	.ASKTKAKAKKEEKAVETEEIELELED....	387	
NTDB id 269 KZH43 RS08665 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTENK	.KDE....PKKEEA..VNEEVPLDLGDELEI	384	
NTDB id 228 SPD RS09265 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTENK	.KDE....PKKEEA..VNEEVPLDLGDELEI	384	
NTDB id 194 SPR RS08825 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTENK	.KDE....PKKEEA..VNEEVPLDLGDELEI	384	
NTDB id 159 SP RS09750 WP 001085462.1	DEKIGQGS	ENAKKYLAEHPEIF	DEIDKQVRSKFGL	IDGEEVSEQDTENK	.KDE....PKKEEA..VNEEVPLDLGDELEI	384	
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NTDB id 453 Spy49 1753c ACI62003.1	GEKIGQGS	ENAKRYLADHPQLF	DEIDRKVRVKFGL	LEESEEEESAMAVAS	.E.....E.....TDDLALDLDNGIEI	376	
NTDB id 115 BSU 16940 NP 389576.2	EERLGQGR	ENAKQFLKENKDIMLMI	QEQIREHYGL	DNNGVVQQAEETQ	.EEL.EFE.E.....	348	
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NTDB id 423272 GZ064 RS04405 WP 017532324.1	NTRLGQGR	ENVKSYLKANKEIANE	IEETKIRDLFKNHDDS	IA..IEEEREQLLE.....E.....SVF.....	355		
NTDB id 1245 Cj1673c YP 002345041.1	DKKLGQGR	ENSKAFLKENPEIA	DEITKAIQNSMG	IEGMISG..SEDDEGEE.....	343		
NTDB id 1214 NCTC11637 00359 SQJ03206.1	DKKLGQGR	ENAKALLKEDKALADE	ITLKIKESIGSNEEIMP	..LPDEPLEEME.....	347		
NTDB id 1211 C694 RS00795 WP 000963128.1	DKKLGQGR	ENAKALLKEDKALADE	ITLKIKESIGSNEEIMP	..LPDEPLEEME.....	347		
NTDB id 1334 RAOC RS04870 WP 004918236.1	DTKLGQGR	DTVKELIKDNPELA	EELEAKIREKLQAK.....	343			
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NTDB id 1124 NGFG RS03960 WP 003688695.1	GAKIGQGN	VDNRVWLKENPEIS	DEIDAKIRALNGVEMHITE	..GTQDET DGER.....PE.....E.....	348		
NTDB id 1123 OK783 RS03845 WP 003688695.1	GAKIGQGN	VDNRVWLKENPEIS	DEIDAKIRALNGVEMHITE	..GTQDET DGER.....PE.....E.....	348		
NTDB id 1427 RS RS02760 WP 011000510.1	GERIGQGR	DNCREFLRENAELARE	EIENKVREHLGVTPMGAV	..TLA.EEVEED.....	352		
NTDB id 1165 A1552VC RS01565 WP 000344154.1	GDKIGQGN	KANACKY LKENPEIAKT	LDKKLREMLLNPENMQL	..IAETSSAAD DVEFGAVPE.....EF.....	354		
NTDB id 1142 GTF74 RS11550 WP 000344154.1	GDKIGQGN	KANACKY LKENPEIAKT	LDKKLREMLLNPENMQL	..IAETSSAAD DVEFGAVPE.....EF.....	354		
NTDB id 1022 ACIAD RS06390 WP 004925639.1	GNKIGQGN	NNVIRYFEENNQIAE	IEIERNIREQLLT KASDQT	..AA.HDETEEPDLL..ES.....	349		
NTDB id 1074 ABD1 RS10195 WP 000344167.1	GNKIGQGN	NNVIRYFEENNQIAE	IEIERNIREQLLT TGTNGA	..VQ.I.EDEE EPDLL..LE.....S.....	349		
NTDB id 1205 PSJM300 05545 AFN77183.1	GSKIGQGN	KANAACKY LEENPEIGQ	EIEEQIRAKLLVTSANTK	..ATPVAEDLADADI.....	347		
consensus	***!!!*****	**	*****	*****	**	**	*

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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 499 SM12261 RS08315 WP 078228268.1	EIEE		384
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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 423272 GZ064 RS04405 WP 017532324.1			355
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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
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NTDB id 1074 ABD1 RS10195 WP 000344167.1			349
NTDB id 1205 PSJM300 05545 AFN77183.1			347
consensus			

-  non conserved
-  similar
-  ≥ 50% conserved