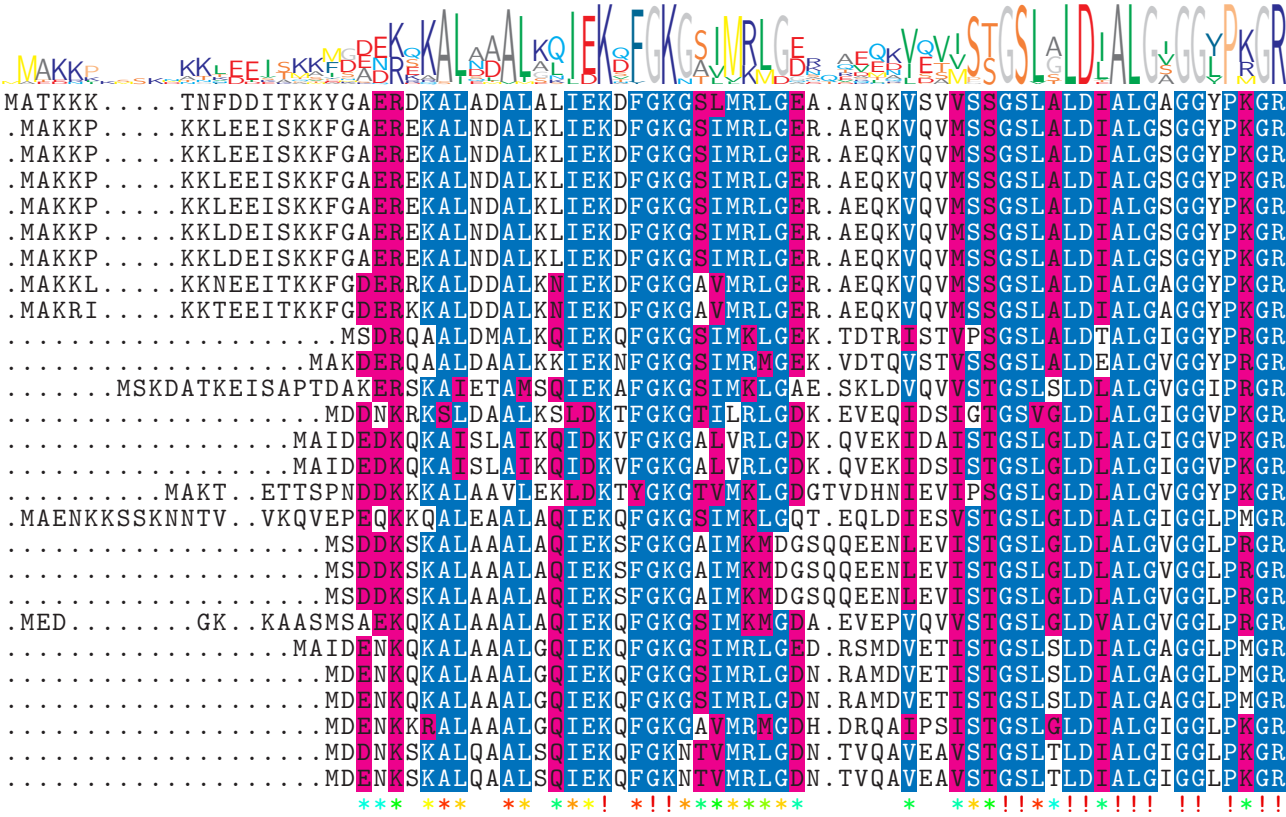


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NTDB id 600 KW2 RS01765 WP 011675413.1
NTDB id 269 KZH43 RS08665 WP 001085462.1
NTDB id 228 SPD RS09265 WP 001085462.1
NTDB id 194 SPR RS08825 WP 001085462.1
NTDB id 159 SP RS09750 WP 001085462.1
NTDB id 499 SM12261 RS08315 WP 078228268.1
NTDB id 527 SMSK321 RS11065 WP 001085454.1
NTDB id 453 Spy49 1753c ACI62003.1
NTDB id 408 SMU RS09530 WP 002262392.1
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 1389 A4U84 RS07560 WP 021112712.1
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NTDB id 1142 GTF74 RS11550 WP 000344154.1
NTDB id 1205 PSJM300 05545 AFN77183.1
NTDB id 1022 ACIAD RS06390 WP 004925639.1
NTDB id 1074 ABD1 RS10195 WP 000344167.1
consensus



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logo

NTDB id 600 KW2 RS01765 WP 011675413.1	SVRLDVRGSTKIEEGS.GDNKTQIGKITKIKVVKNKVAPPFKVALVDIMFGEGISSTGELINIAVEEGI	IKKSGAWFAYN	312			
NTDB id 269 KZH43 RS08665 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKETN	VGKETKIKVVKNKVAPPFKEAVVEIMYEGEGISKTGELLKIASDL	DIIKKAGAWYSYK	311		
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NTDB id 194 SPR RS08825 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKETN	VGKETKIKVVKNKVAPPFKEAVVEIMYEGEGISKTGELLKIASDL	DIIKKAGAWYSYK	311		
NTDB id 159 SP RS09750 WP 001085462.1	SVRLDVRGNTQIKGTG.DQKETN	VGKETKIKVVKNKVAPPFKEAVVEIMYEGEGISKTGELLKIASDL	DIIKKAGAWYSYK	311		
NTDB id 499 SM12261 RS08315 WP 078228268.1	SVRLDVRGSTQIKGTG.DQKDTN	VGKETKIKVVKNKVAPPFKEAFVEIMYEGEGISKTGELLKIASDL	DIIKKAGAWYSYK	311		
NTDB id 527 SMSK321 RS11065 WP 001085454.1	SVRLDVRGSTQIKGTG.DQKDTN	VGKETKIKVVKNKVAPPFKEAFVEIMYEGEGISKTGELLKIASDL	DIIKKAGAWYSYK	311		
NTDB id 453 Spy49 1753c ACI62003.1	SVRLDVRGTTQIKGTG.DQKDSN	IGKETKIKVVKNKVAPPFKVAEVEIMYEGEGISRTGELVKIASDL	DIQKAGAWFSYN	311		
NTDB id 408 SMU RS09530 WP 002262392.1	SVRLDVRGNTQIKGTG.EQKDSN	IGKETKIKVVKNKVAPPFKEAFVEIIMYEGEGISRTGELVKIASDL	GIIQKAGAWYSYN	311		
NTDB id 115 BSU 16940 NP 389576.2	SVRLEVRRAEQLKQGN.....DVMGNKTKIKVVKNKVAPPFRTAEVDIMYEGEGISKEGEIIDLGTEL	DIVQKSGSWYSYE	292			
NTDB id 625 LCA RS02525 WP 011374196.1	TVRLEVRRAETIKNGT.....DMIGNRARIKVVKNKVAPPFKVAEVDIMYGGISRTGELVDMAVEK	DIINKSGSWYSYG	294			
NTDB id 1313 DR RS12030 WP 010888966.1	SVRLDVRKIGQ....PTKVGND	AVANTVKIKTVKNKVAAPFKEVELALVYGKGFQDLS	DLVGLAADMDIIKKAGSFYSYG	307		
NTDB id 1245 Cj1673c YP 002345041.1	SVRLDVRKVAT....L.KQNEEP	IGNRVKVVKNKVAPPFRQAEFDVMFGEGLSREGELIDYGVKLDIV	DKSGAWFSYK	294		
NTDB id 1214 NCTC11637 00359 SQJ03206.1	SVRIDIRRIAA....L.KQNEQH	IGNRAKAKVVKNKVAPPFR	EA	EFDIMFGEGISKEGEIIDYGVKLDIV	DKSGAWLSYQ	296
NTDB id 1211 C694 RS00795 WP 000963128.1	SVRIDIRRIAS....L.KQNEQH	IGNRAKAKVVKNKVAPPFR	EA	EFDIMFGEGISKEGEIIDYGVKLDIV	DKSGAWLSYQ	296
NTDB id 1334 RAOC RS04870 WP 004918236.1	SVRIDIRRLSDTGKIKDKSGEV	IGNRTKVVKNKVAPPFKSAEFDIMYEGEGVSKVGEILD	VATDLDIIQKSGSWFSYQ	307		
NTDB id 1389 A4U84 RS07560 WP 021112712.1	SVRLDIRRCGV....V.KDGDEI	IGSETKVVKNKVAPPFR	EVQFDIMYEGEGISRMNELLILAEANGFI	IKKSGAWFSYD	310	
NTDB id 1130 NGFG RS03960 WP 003688695.1	SVRLDIRRTGS....I.KKGE	EEVLGNETRVKVIKNKVAPPFRQAEFD	DILYEGEGISWEGELIDIGVKN	DIINKSGAWYSYN	294	
NTDB id 1124 NGFG RS03960 WP 003688695.1	SVRLDIRRTGS....I.KKGE	EEVLGNETRVKVIKNKVAPPFRQAEFD	DILYEGEGISWEGELIDIGVKN	DIINKSGAWYSYN	294	
NTDB id 1123 OK783 RS03845 WP 003688695.1	SVRLDIRRTGS....I.KKGE	EEVLGNETRVKVIKNKVAPPFRQAEFD	DILYEGEGISWEGELIDIGVKN	DIINKSGAWYSYN	294	
NTDB id 1427 RS RS02760 WP 011000510.1	SVRLDIRRIGS....I.KKGEDEV	VGNETKVVKNKVAPPFR	EA	IFDILYAGVSR	REGELIDLGVEAKVVEKSGAWYSYN	302
NTDB id 316433 D5069 RS13990 WP 000963150.1	SVRLDIRRIGA....V.KEGDNV	VGSETRVKVVKNKIAAPFKQAEFQ	ILYGE	GINFYGELVDLGVKEK	LIEKAGAWYSYN	295
NTDB id 1165 A1552VC RS01565 WP 000344154.1	SVRLDIRRTGA....I.KEGEEV	VGNETRIKVVKNKIAAPFKEANTQIMYGGGFNR	REGELIDLG	VKHKMVEKSGAWYSYN	293	
NTDB id 1142 GTF74 RS11550 WP 000344154.1	SVRLDIRRTGA....I.KEGEEV	VGNETRIKVVKNKIAAPFKEANTQIMYGGGFNR	REGELIDLG	VKHKMVEKSGAWYSYN	293	
NTDB id 1205 PSJM300 05545 AFN77183.1	SVRLDIRRTGA....V.KEGDEV	VGSETRVKVVKNKVAPPFRQAEFQ	ILYGKGIYRNGE	IDLG	VQQGLVEKSGAWYAYK	293
NTDB id 1022 ACIAD RS06390 WP 004925639.1	SVRLDIRRIGQ....V.KEGDEI	IGSETKVVKNKMAPPFRE	AI	FQILYGKGVNQLGELVD	LAVQQNIVQKAGAWYSYQ	293
NTDB id 1074 ABD1 RS10195 WP 000344167.1	SVRLDIRRIGQ....V.KEGDEI	VGSETKVVKNKMAPPFKE	AI	FQILYGKGTNQLGELVD	LAVQQDIVQKAGAWYSYQ	293
consensus	*!!**!* *	* ** *****!!*!!*!!*!*	*	*****!!*!*** ***** *	*** ! !*****!	


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NTDB id 600 KW2 RS01765 WP 011675413.1
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NTDB id 228 SPD RS09265 WP 001085462.1
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NTDB id 453 Spy49 1753c ACI62003.1
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NTDB id 625 LCA RS02525 WP 011374196.1
NTDB id 1313 DR RS12030 WP 010888966.1
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consensus

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Sequence	Score
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DEKIGQGSENACKKYLAEHPEIFDEIDKQVRSKFGGLIDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLDLGDELEIE	385
DEKIGQGSENACKKYLAEHPEIFDEIDKQVRSKFGGLIDGEEVSEQDTENKKDE...PKKEEA..VNEEVPLDLGDELEIE	385
DEKIGQGSENACKKYLAENPEIFDEIDHQVRVQFGLIDGEEIAES...KKDE...AAQVDS..VNEEVTLDLGDLEIE	381
DEKIGQGSENACKKYLAENPEVFAEIDHQVRVQFGLIDGEEAAES...KKDE...VAQVDS..VNEEVTLDLGDLEIE	381
GEKIGQGSENAKRYLADHPQLFDEIDRKVRVKFGLLEESEEEESAMAVASE.....E.....TDDLALDLNGIEIE	377
GEKIGQGSENAKKFLADNPEIFDDIDHKVRVQYGLIEEDNTEEKQSSKEK.....ETDEK..ADKNLVLELDDTIELE	382
EERLGGGRENAAKQFLKENKDIMLMIQEQUIREHYGLDNGGVVQQAEETQEEL.EFE.E.....	348
SERIGGGRENAAKNYLADHEDVEDEVRLKVRAAAYGISDVPEEDLPTTEDE.QI.NILPDDST.....EE.....	355
DERIGGQKEKTIATYIAERPMEQEIRDRVMAAIRAGNAGEAPALAPAPAAPEAA...EA.....	363
DKKLGQGRENSAKFLKENPEIADEITKATQNSMGIEMG.....ISGSEDDG.....EE.....	343
DKKLGQGRENAKALLKEDKALADEITLKIKESIGSNEE....IMPLPDEPL....EE..ME.....	347
DKKLGQGRENAKALLKEDKALADEITLKIKESIGSNEE....IMPLPDEPL....EE..ME.....	347
DTKLGQGRDVTVKELIKDNPELAELEAKIREKLQAK.....	343
GTKIGQGGKNNNAVKWLKENPEIADKLEQIRNTLASNP.....SVLKATASDSN...DESDVEEFSEEL.....	372
GAKIGQGGKDNVRVWLKENPEISDEIDAKIRALNGVEMH....ITEG.....T...QDETGDGERPEE.....	348
GAKIGQGGKDNVRVWLKENPEISDEIDAKIRALNGVEMH....ITEG.....T...QDETGDGERPEE.....	348
GAKIGQGGKDNVRVWLKENPEISDEIDAKIRALNGVEMH....ITEG.....T...QDETGDGERPEE.....	348
GERIGQGRDNCREFLRENAELAREIENKVRHGLVTPM....GAVTLAE.EVE...ED.....	352
GEKIGQGGKANATTWLKENPATAKIEIKRVRELLSNQN....ATPDFAVD....DSEGVAETNEDF.....	353
GDKIGQGGKANACKYLKENPEIAKTLDDKKLREMLLNPN....MQLIAETSSAA..DDVEFGAVPEEF.....	354
GDKIGQGGKANACKYLKENPEIAKTLDDKKLREMLLNPN....MQLIAETSSAA..DDVEFGAVPEEF.....	354
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GNKIGQGGKNNVIRIFYENNQIAEIEIRNIREQLLTGT....NGAVQ.I.EDE...EEPDLLES.....	349

logo

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 499 SM12261 RS08315 WP 078228268.1	IEE	384
NTDB id 527 SMSK321 RS11065 WP 001085454.1	IEE	384
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NTDB id 1389 A4U84 RS07560 WP 021112712.1	...	372
NTDB id 1130 NGFG RS03960 WP 003688695.1	...	348
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NTDB id 1123 OK783 RS03845 WP 003688695.1	...	348
NTDB id 1427 RS RS02760 WP 011000510.1	...	352
NTDB id 316433 D5069 RS13990 WP 000963150.1	...	353
NTDB id 1165 A1552VC RS01565 WP 000344154.1	...	354
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NTDB id 1205 PSJM300 05545 AFN77183.1	...	347
NTDB id 1022 ACIAD RS06390 WP 004925639.1	...	349
NTDB id 1074 ABD1 RS10195 WP 000344167.1	...	349

consensus

 non conserved
 similar
 ≥ 50% conserved