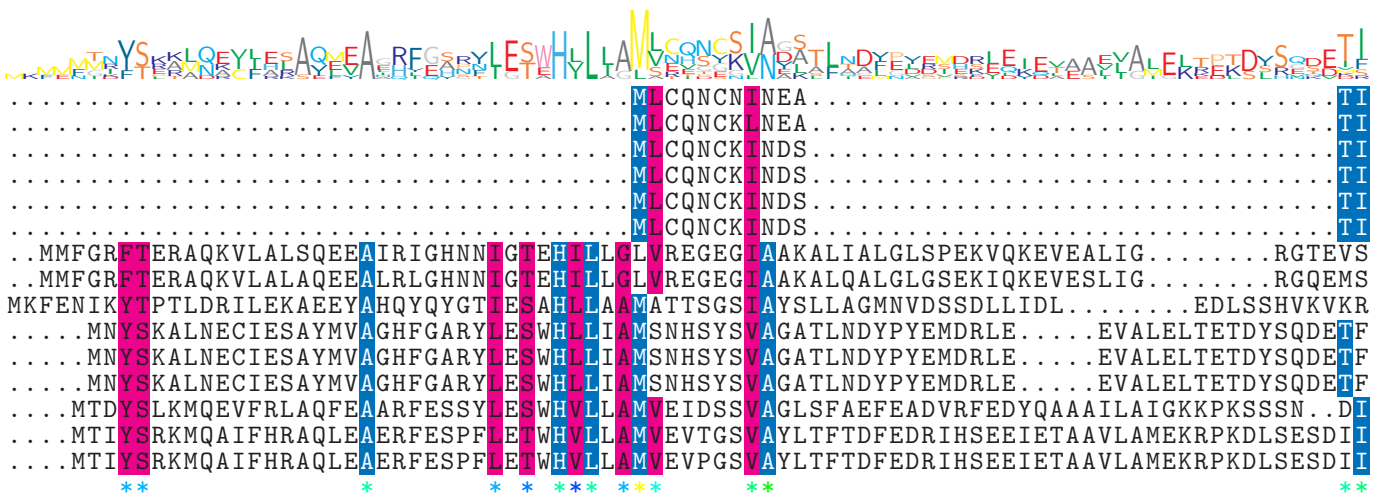


logo

NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 241 SP RS04015 WP 000882523.1
NTDB id 281 KZH43 RS03550 WP 000882517.1
NTDB id 245 SPD RS03860 WP 000882517.1
NTDB id 243 SPR RS03635 WP 000882517.1
NTDB id 133207 BF28 RS02955 WP 000971192.1
NTDB id 85 BSU 00860 NP 387967.1
NTDB id 610 V4T04 RS10165 WP 012897346.1
NTDB id 290 KZH43 RS10025 WP 001109677.1
NTDB id 289 SPD RS10700 WP 001109677.1
NTDB id 287 SP RS11210 WP 001109712.1
NTDB id 377 SMU RS09275 WP 002262344.1
NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 329 STU RS10020 WP 011225298.1

consensus

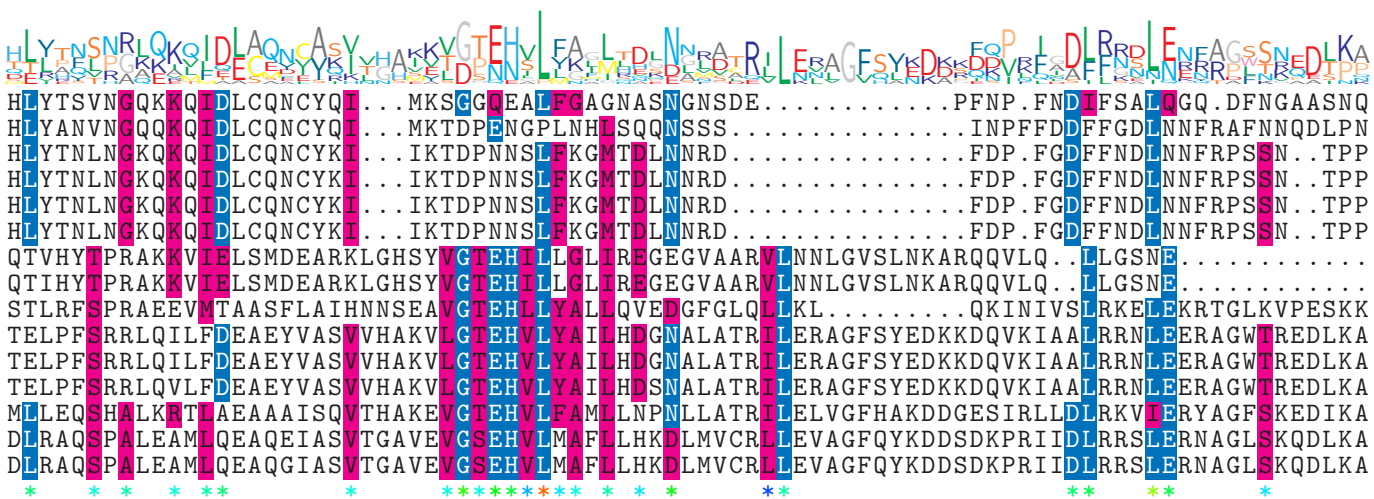


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NTDB id 287 SP RS11210 WP 001109712.1
NTDB id 377 SMU RS09275 WP 002262344.1
NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 329 STU RS10020 WP 011225298.1

consensus



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NTDB id 601 KW2 RS02615 WP 021036805.1
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NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 329 STU RS10020 WP 011225298.1
consensus



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NTDB id 601 KW2 RS02615 WP 021036805.1
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NTDB id 297 STER RS00545 WP 011680614.1
NTDB id 329 STU RS10020 WP 011225298.1
consensus



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NTDB id 378 SMU RS02690 WP 002263569.1	GNMDAGNILKPALARGEELQLVGATTTLNEYR.IIEKDAALERRMQPVKKVDEPSVAETITILKGIQPKYEDYHHVKYTDAAIEAAAN	327
NTDB id 241 SP RS04015 WP 000882523.1	GNMDAGNILKPALARGEELQLVGATTTLNEYR.IIEKDAALERRMQPVKKVDEPTVDETITILKGIQKKYEDYHHVQYTDAAIEAAAT	326
NTDB id 281 KZH43 RS03550 WP 000882517.1	GNMDAGNILKPALARGEELQLVGATTTLNEYR.IIEKDAALERRMQPVKKVDEPTVDETITILKGIQKKYEDYHHVQYTDAAIEAAAT	326
NTDB id 245 SPD RS03860 WP 000882517.1	GNMDAGNILKPALARGEELQLVGATTTLNEYR.IIEKDAALERRMQPVKKVDEPTVDETITILKGIQKKYEDYHHVQYTDAAIEAAAT	326
NTDB id 243 SPR RS03635 WP 000882517.1	GNMDAGNILKPALARGEELQLVGATTTLNEYR.IIEKDAALERRMQPVKKVDEPTVDETITILKGIQKKYEDYHHVQYTDAAIEAAAT	326
NTDB id 133207 BF28 RS02955 WP 000971192.1	GAIDASNILKPSLARGEELQCIGATTLDEYRKYIEKDAALERRFQPIHVDEPSLDESTQILKGLRDRYEAAHHRVSIITDDAIDAAVK	377
NTDB id 85 BSU 00860 NP 387967.1	GAIDASNILKPSLARGEELQCIGATTLDEYRKYIEKDAALERRFQPIQVDQPSVDESIQILQGLRDRYEAAHHRVSIITDDAIEAAVK	376
NTDB id 610 V4T04 RS10165 WP 012897346.1	SVNDAANILKPALARGDFQMVGATTYHEYQKYIEKDEALERRLARINVDEPSPDEAIAILQGLREKFEDYHQVKFTDQAIKSAVM	390
NTDB id 290 KZH43 RS10025 WP 001109677.1	STLDAANILKPALARGTLRTVGATTQEEYQKHIEKDAALSRRFAKVTIEEPSVADSMTILQGLKATYEKHHRVQITDEAVETAVK	403
NTDB id 289 SPD RS10700 WP 001109677.1	STLDAANILKPALARGTLRTVGATTQEEYQKHIEKDAALSRRFAKVTIEEPSVADSMTILQGLKATYEKHHRVQITDEAVETAVK	403
NTDB id 287 SP RS11210 WP 001109712.1	STLDAANILKPALARGTLRTVGATTQEEYQKHIEKDAALSRRFAKVTIEEPSVADSMTILQGLKATYEKHHRVQITDEAVETAVK	403
NTDB id 377 SMU RS09275 WP 002262344.1	STLDAANILKPALARGSLRTIGATTQEEYQKHIEKDAALSRRFAKVTIEEPSEEEAYQILLGLKKSSETYHHVVISDAAVMAAVK	407
NTDB id 297 STER RS00545 WP 011680614.1	STLDAANILKPALARGTLHVMVGATTQAHEYQKHIEKDAALSRRFAKITIEEPSVSEATDILNGLRSSYEDYHRVTITDAAVETAVK	410
NTDB id 329 STU RS10020 WP 011225298.1	STLDAANILKPALARGTLHVMVGATTQAHEYQKHIEKDAALSRRFAKITIEEPSVSEATDILNGLRSSYEDYHRVTITDAAVETAVK	410
consensus	*!!!!!!!!*!!!!*****!!!!!! !! * !!!!!*!!!!!! * ****!*****!! !** *!****! *! !****!	

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NTDB id 241 SP RS04015 WP 000882523.1	LSNRYIQDRFLPDKAIDLLDEAGSKMNLTLNLFV..DPKVIDQRLIEAENLKSQATREEDFEKAAYFRDQIAKYKEMQK.....K	403
NTDB id 281 KZH43 RS03550 WP 000882517.1	LSNRYIQDRFLPDKAIDLLDEAGSKMNLTLNLFV..DPKVIDQRLIEAENLKSQATREEDFEKAAYFRDQIAKYKEMQK.....K	403
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NTDB id 133207 BF28 RS02955 WP 000971192.1	LSDRYITDRFLPDKAIDLLDEAASKVRLRSYTTTPPNLKELEVKLEEIRKEKDAAVQSQEFEKAAASLRDMEQRLREKLEDTKRQWK	462
NTDB id 85 BSU 00860 NP 387967.1	LSDRYISDRFLPDKAIDLLDEAGSKVRLRSFTTPPNLKELEQKLEVRKEKDAAVQSQEFEKAAASLRDTEQRLREQVEDTKKSWK	461
NTDB id 610 V4T04 RS10165 WP 012897346.1	LSVRYMTSRKLPDKAIDLLDEAAAARKISVKNQQTGRDLLEKELAEAEQEELSEAVIKLDIKASRTKEKAVEKIADKIYKFS....	471
NTDB id 290 KZH43 RS10025 WP 001109677.1	MAHRYLTSRHLPDSAIDLLDEAAATVQNKAKHVKADDSDL....S....PADKALMDGKWKQAAQLIAKEE.....E....	467
NTDB id 289 SPD RS10700 WP 001109677.1	MAHRYLTSRHLPDSAIDLLDEAAATVQNKAKHVKADDSDL....S....PADKALMDGKWKQAAQLIAKEE.....E....	467
NTDB id 287 SP RS11210 WP 001109712.1	MAHRYLTSRHLPDSAIDLLDEAAATVQNKAKHVKADDSDL....S....PADKALMDGKWKQAAQLIAKEE.....E....	467
NTDB id 377 SMU RS09275 WP 002262344.1	GAHRYLSGNLPSAIDLLDEASATVQGLVKK..KAPAYL....T....DLDHALITNDYQLAKRLLKKEK.....K....	469
NTDB id 297 STER RS00545 WP 011680614.1	AAHRYLTSKNLPSAIDLLDEASATVQVRKK..EDKREI....T....PLDEALISGDIGAAVKQYKANQ.....K....	472
NTDB id 329 STU RS10020 WP 011225298.1	AAHRYLTSKNLPSAIDLLDEASATVQVRKK..EAKREI....T....PLDEALISGDIGAAVKQYKANQ.....K....	472
consensus	** !!!!! * !!!!!*!!!!!!*!!!!* **** * * * **** * * !* ** *	

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NTDB id 601 KW2 RS02615 WP 021036805.1	EVTDEDMPVITEKDI	EQIVEQKTQIPVGD	LKEKEQQTQLINL	ADDLKAHVIGQDE	AVDKISK	AI	RRSRVGL	GKPNRPIGSFL	LVGP	482					
NTDB id 378 SMU RS02690 WP 002263569.1	KLDKENTPVITEKNI	IEVIVEQKTNIPVG	ELKEKEQSQLIHL	ADDLKTRVIGQDA	AVDKIAKA	AI	RRNRVGL	GTPNRPIGSFL	LVGP	489					
NTDB id 241 SP RS04015 WP 000882523.1	KITDQDTPSISEKTI	IEHIIIEQKTNIPV	GDLEKEEQSQLIH	LAEDLKSHVIGQD	DAVDKIAKA	AI	RRNRVGL	GTPNRPIGSFL	LVGP	488					
NTDB id 281 KZH43 RS03550 WP 000882517.1	KITDQDTPITISEKTI	IEHIIIEQKTNIPV	GDLEKEEQSQLIH	LAEDLKSHVIGQD	DAVDKIAKA	AI	RRNRVGL	GTPNRPIGSFL	LVGP	488					
NTDB id 245 SPD RS03860 WP 000882517.1	KITDQDTPITISEKTI	IEHIIIEQKTNIPV	GDLEKEEQSQLIH	LAEDLKSHVIGQD	DAVDKIAKA	AI	RRNRVGL	GTPNRPIGSFL	LVGP	488					
NTDB id 243 SPR RS03635 WP 000882517.1	KITDQDTPITISEKTI	IEHIIIEQKTNIPV	GDLEKEEQSQLIH	LAEDLKSHVIGQD	DAVDKIAKA	AI	RRNRVGL	GTPNRPIGSFL	LVGP	488					
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NTDB id 85 BSU 00860 NP 387967.1	EKQGGENSEVTVDD	IAMVVSSWTGVPV	SKIAQTETDKLLN	MENILHSRVIGQ	DEAVVA	AKAVRR	ARAGL	KDPKRP	IGSFIFLGP	546					
NTDB id 610 V4T04 RS10165 WP 012897346.1	VKEDKRQEVTDQAV	VAVASTLTGVPIT	QMTKSESDRLIN	LEKELHKKRVVQ	EEAISA	VSRAIR	RRARSG	VADSR	RRPMGSFM	FLGP	555				
NTDB id 290 KZH43 RS10025 WP 001109677.1	VPV.YKDLVTESD	ILTTLSRLSGIPV	QKLTQTDAKKYL	NLEAEALHKKRV	IGQDQAVSS	ISRAIR	RNQSGIR	SHKRP	IGSFM	FLGP	550				
NTDB id 289 SPD RS10700 WP 001109677.1	VPV.YKDLVTESD	ILTTLSRLSGIPV	QKLTQTDAKKYL	NLEAEALHKKRV	IGQDQAVSS	ISRAIR	RNQSGIR	SHKRP	IGSFM	FLGP	550				
NTDB id 287 SP RS11210 WP 001109712.1	VPV.YKDLVTESD	ILTTLSRLSGIPV	QKLTQTDAKKYL	NLEAEALHKKRV	IGQDQAVSS	ISRAIR	RNQSGIR	SHKRP	IGSFM	FLGP	550				
NTDB id 377 SMU RS09275 WP 002262344.1	PLLKKRAEVKKEED	ILATLSKLSGIPV	KKLTQADSKKYL	NLERELHKKRV	IGQDDAVSS	ISRAIR	RNQSGIR	VGKRP	IGSFM	FLGP	553				
NTDB id 297 STER RS00545 WP 011680614.1	AKFPPKALVDADQ	IMQTLSRLSGIPV	EKMTQTDSKRYL	NLESELHKKRV	IGQDEAVSA	ISRAIR	RNQSGIR	TGKRP	IGSFM	FLGP	556				
NTDB id 329 STU RS10020 WP 011225298.1	AKFPPKALVDADQ	IMQTLSRLSGIPV	EKMTQTDSKRYL	NLESELHKKRV	IGQDEAVSA	ISRAIR	RNQSGIR	TGKRP	IGSFM	FLGP	556				
consensus	*	*****	*	***	*	!!*	*	*****	!!*	!!*!!*!!*!!*	*	!!*!!*!!*	!!*	*	!!*!!*!!*!!*!!*

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NTDB id 601 KW2 RS02615 WP 021036805.1	TGVGKTELAKQ	LAKELFGSS	ESMIRFDMSEYMEKHSV	AKL	LIGAPPGYVGY	EEAGQLTER	VVRNPYS	LILLDE	TEKAHPDV	MHMFL	567
NTDB id 378 SMU RS02690 WP 002263569.1	TGVGKTEL	SKQLAIELFGS	EDSMIRFDMSEYMEKHAV	AKLVG	APPGYVGY	EEAGQLTEK	VVRNPYS	LILLDE	VEKAHPDV	MHMFL	574
NTDB id 241 SP RS04015 WP 000882523.1	TGVGKTEL	SKQLAIELFGS	ADSMIRFDMSEYMEKHSV	AKLVG	APPGYVGY	DEAGQLTEK	VHRNPYS	LILLDE	VEKAHPDV	MHMFL	573
NTDB id 281 KZH43 RS03550 WP 000882517.1	TGVGKTEL	SKQLAIELFGS	ADSMIRFDMSEYMEKHSV	AKLVG	APPGYVGY	DEAGQLTEK	VVRNPYS	LILLDE	VEKAHPDV	MHMFL	573
NTDB id 245 SPD RS03860 WP 000882517.1	TGVGKTEL	SKQLAIELFGS	ADSMIRFDMSEYMEKHSV	AKLVG	APPGYVGY	DEAGQLTEK	VHRNPYS	LILLDE	VEKAHPDV	MHMFL	573
NTDB id 243 SPR RS03635 WP 000882517.1	TGVGKTEL	SKQLAIELFGS	ADSMIRFDMSEYMEKHSV	AKLVG	APPGYVGY	DEAGQLTEK	VHRNPYS	LILLDE	VEKAHPDV	MHMFL	573
NTDB id 133207 BF28 RS02955 WP 000971192.1	TGVGKTELARALA	ESMFGDE	EDAMIRIDMSEYMEKHST	SRLVGS	PPGYVGY	EEGGQLTEK	VVRKPYSV	VLLDE	VEKAHPDV	VFNILL	632
NTDB id 85 BSU 00860 NP 387967.1	TGVGKTELARALA	ESIFGDE	EESMIRIDMSEYMEKHST	SRLVGS	PPGYVGY	DEGGQLTEK	VVRKPYSV	VLLDE	TEKAHPDV	VFNILL	631
NTDB id 610 V4T04 RS10165 WP 012897346.1	TGVGKTELAKALADS	VFGSE	EDNMIRVDMSEFMEKHST	SRLIG	APPGYVGY	DEGGQLTER	VVRNKPYSV	VLLDE	VEKAHPDV	VFNIML	640
NTDB id 290 KZH43 RS10025 WP 001109677.1	TGVGKTELAKALA	EVLFDD	ESALIRFDMSEYMEKFAA	SRLNG	APPGYVGY	EEGGELTEK	VVRNKPYSV	VLLF	DEVEKAHPD	IFNVILL	635
NTDB id 289 SPD RS10700 WP 001109677.1	TGVGKTELAKALA	EVLFDD	ESALIRFDMSEYMEKFAA	SRLNG	APPGYVGY	EEGGELTEK	VVRNKPYSV	VLLF	DEVEKAHPD	IFNVILL	635
NTDB id 287 SP RS11210 WP 001109712.1	TGVGKTELAKALA	EVLFDD	ESALIRFDMSEYMEKFAA	SRLNG	APPGYVGY	EEGGELTEK	VVRNKPYSV	VLLF	DEVEKAHPD	IFNVILL	635
NTDB id 377 SMU RS09275 WP 002262344.1	TGVGKTELAKALA	EVLFDD	ESALIRFDMSEYMEKFAA	SRLNG	APPGYVGY	EEGGELTEK	VVRNKPYSV	VLLF	DEVEKAHPD	IFNVILL	638
NTDB id 297 STER RS00545 WP 011680614.1	TGVGKTELAKALA	EVLFDD	ESALIRFDMSEYMEKFAA	SRLNG	APPGYVGY	DEGGELTEK	VVRNKPYSV	VLLF	DETEKAHPD	IFNVILL	641
NTDB id 329 STU RS10020 WP 011225298.1	TGVGKTELAKALA	EVLFDD	ESALIRFDMSEYMEKFAA	SRLNG	APPGYVGY	DEGGELTEK	VVRNKPYSV	VLLF	DETEKAHPD	IFNVILL	641
consensus	!!!!!!!!!!	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	* * * * *	

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NTDB id 601 KW2 RS02615 WP 021036805.1	ISNQTQETAETTDDEEVPAE	748
NTDB id 378 SMU RS02690 WP 002263569.1	VIKASNK.VETVTKATSD.	753
NTDB id 241 SP RS04015 WP 000882523.1	QIKSAKK.AEVKSSEKEK.	752
NTDB id 281 KZH43 RS03550 WP 000882517.1	QIKSAKK.AEVKSSEKEK.	752
NTDB id 245 SPD RS03860 WP 000882517.1	QIKSAKK.AEVKSSEKEK.	752
NTDB id 243 SPR RS03635 WP 000882517.1	QIKSAKK.AEVKSSEKEK.	752
NTDB id 133207 BF28 RS02955 WP 000971192.1	VIHSAEKVK.....	811
NTDB id 85 BSU 00860 NP 387967.1	VVKTTAKTN.....	810
NTDB id 610 V4T04 RS10165 WP 012897346.1	KIAQIV.....	816
NTDB id 290 KZH43 RS10025 WP 001109677.1	KFDIA.....	810
NTDB id 289 SPD RS10700 WP 001109677.1	KFDIA.....	810
NTDB id 287 SP RS11210 WP 001109712.1	KFDIA.....	810
NTDB id 377 SMU RS09275 WP 002262344.1	KFDIV.....	813
NTDB id 297 STER RS00545 WP 011680614.1	TFTVV.....	816
NTDB id 329 STU RS10020 WP 011225298.1	TFTVV.....	816
consensus		



-  non conserved
-  similar
-  ≥ 50% conserved