

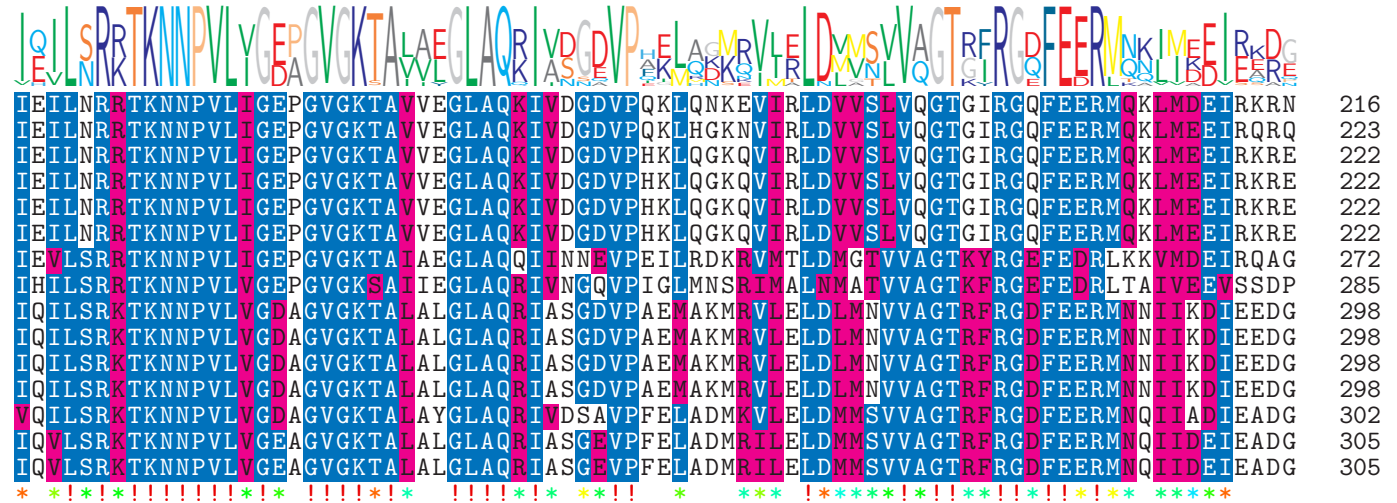
NTDB id	601	KW2	RS02615	WP	021036805.1	MLCQNCNINEA.....	11
NTDB id	378	SMU	RS02690	WP	002263569.1	MLCQNCKINEA.....	11
NTDB id	281	KZH43	RS03550	WP	000882517.1	MLCQNCKINDS.....	11
NTDB id	245	SPD	RS03860	WP	000882517.1	MLCQNCKINDS.....	11
NTDB id	243	SPR	RS03635	WP	000882517.1	MLCQNCKINDS.....	11
NTDB id	241	SP	RS04015	WP	000882523.1	MLCQNCKINDS.....	11
NTDB id	85	BSU	O0860	NP	387967.1	..MMFGRFTERAQKVLALAQEEALRLGHNNIGTEHLLCLVREGEGIAAKALQALGLGSEKIQKEVESLI.....GR	70
NTDB id	610	V4T04	RS10165	WP	012897346.1	MKFENIKYPTLDRILEKAEEYAHHQYQYGTTESAHLLAAMATTSGSTAYSLLAGMNVDSDDLII.....DLEDLSSH	72
NTDB id	109088	ACAM21	RS11020	WP	369608076.1	MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE....EVALELTETDYS	70
NTDB id	290	KZH43	RS10025	WP	001109677.1	MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE....EVALELTETDYS	70
NTDB id	289	SPD	RS10700	WP	001109677.1	MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE....EVALELTETDYS	70
NTDB id	287	SP	RS11210	WP	001109712.1	MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE....EVALELTETDYS	70
NTDB id	377	SMU	RS09275	WP	002262344.1	MTDISLKMQEVRFLAQFEAAERFESSYLESWHVILLAMVEIDSSVAGLSFAEFEADVRFEDYQAAAAILAIGKKPKSSS	76
NTDB id	297	STER	RS00545	WP	011680614.1	MTIYSRKMQAIFHRAQLEAERFESPFLIEWHVILLAMVEVTGSVAYLTFDTDFEDRIHSEEIETA AVLAMEKRPKDLS	76
NTDB id	329	STU	RS10020	WP	011225298.1	MTIYSRKMQAIFHRAQLEAERFESPFLIEWHVILLAMVEVPGSVAYLTFDTDFEDRIHSEEIETA AVLAMEKRPKDLS	76
consensus						*** ** **** ***	

Accession	Species	Gene	Protein	Sequence	Position
NTDB id 601	KW2	RS02615	WP 021036805.1	...TIHLYTSVNGQKKQIDLCQNCYQI...MKS	72
NTDB id 378	SMU	RS02690	WP 002263569.1	...TIHLYANVNGQKKQIDLCQNCYQI...MKTDP	70
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NTDB id 243	SPR	RS03635	WP 000882517.1	...TIHLYTNLNGQKKQIDLCQNCYKI...IKTDPNNS	69
NTDB id 241	SP	RS04015	WP 000882523.1	...TIHLYTNLNGQKKQIDLCQNCYKI...IKTDPNNS	69
NTDB id 85	BSU	O0860	NP 387967.1	GQEMSQTIHYTPRAKKVIELSMDEARKLGHSYV	141
NTDB id 610	V4T04	RS10165	WP 012897346.1	VKVKRSTLRFSPRAFEVMTAASFLAIHNNSEAV	143
NTDB id 109088	ACAM21	RS11020	WP 369608076.1	QDETFTELPFSRRRLQVLFDAAEYVASVHAKVL	150
NTDB id 290	KZH43	RS10025	WP 001109677.1	QDETFTELPFSRRRLQVLFDAAEYVASVHAKVL	150
NTDB id 289	SPD	RS10700	WP 001109677.1	QDETFTELPFSRRRLQVLFDAAEYVASVHAKVL	150
NTDB id 287	SP	RS11210	WP 001109712.1	QDETFTELPFSRRRLQVLFDAAEYVASVHAKVL	150
NTDB id 377	SMU	RS09275	WP 002262344.1	N...DIMLEQSHALKRTLAEAAAIQVTHAKEVG	154
NTDB id 297	STER	RS00545	WP 011680614.1	ESDIIDLRAQSPALEAMQEAQEIASVTGAVEVG	156
NTDB id 329	STU	RS10020	WP 011225298.1	ESDIIDLRAQSPALEAMQEAQGIASVTGAVEVG	156
consensus					

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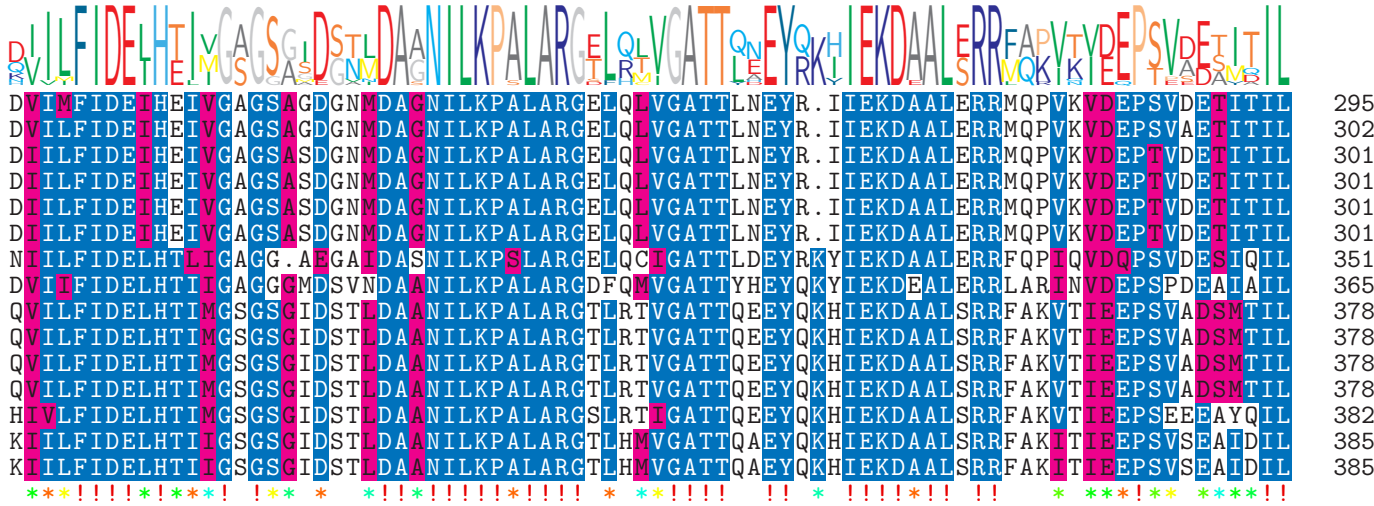
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NTDB id 281 KZH43 RS03550 WP 000882517.1
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NTDB id 85 BSU 00860 NP 387967.1
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NTDB id 109088 ACAM21 RS11020 WP 369608076.1
NTDB id 290 KZH43 RS10025 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	601	KW2	RS02615	WP	021036805.1
NTDB	id	378	SMU	RS02690	WP	002263569.1
NTDB	id	281	KZH43	RS03550	WP	000882517.1
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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	329	STU	RS10020	WP	011225298.1
consensus						



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NTDB	id	281	KZH43	RS03550	WP	000882517.1	REEDFEKAAAYFRDQIAKYKEMQKK.....KITDQDTPIISEKT	IEHII	EQKTN	IPVGD	LKEKE	QSQSL	IHLAED	LKSHVI	453
NTDB	id	245	SPD	RS03860	WP	000882517.1	REEDFEKAAAYFRDQIAKYKEMQKK.....KITDQDTPIISEKT	IEHII	EQKTN	IPVGD	LKEKE	QSQSL	IHLAED	LKSHVI	453
NTDB	id	243	SPR	RS03635	WP	000882517.1	REEDFEKAAAYFRDQIAKYKEMQKK.....KITDQDTPIISEKT	IEHII	EQKTN	IPVGD	LKEKE	QSQSL	IHLAED	LKSHVI	453
NTDB	id	241	SP	RS04015	WP	000882523.1	REEDFEKAAAYFRDQIAKYKEMQKK.....KITDQDTPSISEKT	IEHII	EQKTN	IPVGD	LKEKE	QSQSL	IHLAED	LKSHVI	453
NTDB	id	85	BSU	00860	NP	387967.1	QSQEFEEKAAASLRDTEQRLREQVEDTKKSWKEKQGQENSEVTVDD	IAMVV	SSWTV	GVPVSK	IAQTETD	KLNLN	MENIL	LHSRVI	511
NTDB	id	610	V4T04	RS10165	WP	012897346.1	IKLDIKASRTKEKA VEKIADKIYKF.....SVKEDKRQEVTDQA	VVAVAS	TLTGVP	ITQMTK	SESDRL	INLEKE	ELHKRV	V	520
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NTDB	id	289	SPD	RS10700	WP	001109677.1	MDGKWKQAAQLIAKE.....E.....EVPV.YKDLVTESD	ILTTL	SRLSG	IPVQKL	TQTD	DAKKYL	NLEAEL	LHKRVI	515
NTDB	id	287	SP	RS11210	WP	001109712.1	MDGKWKQAAQLIAKE.....E.....EVPV.YKDLVTESD	ILTTL	SRLSG	IPVQKL	TQTD	DAKKYL	NLEAEL	LHKRVI	515
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NTDB	id	297	STER	RS00545	WP	011680614.1	ISGDIGA AVKQYKAN.....Q.....KAKFPKPA LVDADQ	IMQTL	SRLSG	IPVEKMT	QTDS	KRYL	NLESEL	LHKRVI	521
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consensus							* * * *	*	*****	*	*****	! *	*	* * * * *	! * * * ! *

NTDB	id	601	KW2	RS02615	WP	021036805.1	GQDEAVDKISKAIRRSRVGLGKPNRPIGSFLFVGPTGVGKTELAKQLAKELFGSSES	MIRFDMSEYMEKHSV	AKLIGAPP	527	
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NTDB	id	281	KZH43	RS03550	WP	000882517.1	GQDDAVDKIIAKAIRRNVRVGLGTPNRPIGSFLFVGPTGVGKTEL	SKQLAIELFGSADS	MIRFDMSEYMEKHSV	AKLVGAPP	533
NTDB	id	245	SPD	RS03860	WP	000882517.1	GQDDAVDKIIAKAIRRNVRVGLGTPNRPIGSFLFVGPTGVGKTEL	SKQLAIELFGSADS	MIRFDMSEYMEKHSV	AKLVGAPP	533
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NTDB	id	610	V4T04	RS10165	WP	012897346.1	GQEEAISAIVSRAIRRARSGVADSRPMGSFIFLGPTGVGKTEL	AKALADSIFGSEDN	MIRVDMSEFMEKHST	SRLIGAPP	600
NTDB	id	109088	ACAM21	RS11020	WP	369608076.1	GQDQAVSSISRAIRRNQSGIRSHKRPIGSFMFLGPTGVGKTEL	AKALAEVLFDDESA	LIRFDMSEYMEKFAA	SRLNGAPP	595
NTDB	id	290	KZH43	RS10025	WP	001109677.1	GQDQAVSSISRAIRRNQSGIRSHKRPIGSFMFLGPTGVGKTEL	AKALAEVLFDDESA	LIRFDMSEYMEKFAA	SRLNGAPP	595
NTDB	id	289	SPD	RS10700	WP	001109677.1	GQDQAVSSISRAIRRNQSGIRSHKRPIGSFMFLGPTGVGKTEL	AKALAEVLFDDESA	LIRFDMSEYMEKFAA	SRLNGAPP	595
NTDB	id	287	SP	RS11210	WP	001109712.1	GQDQAVSSISRAIRRNQSGIRSHKRPIGSFMFLGPTGVGKTEL	AKALAEVLFDDESA	LIRFDMSEYMEKFAA	SRLNGAPP	595
NTDB	id	377	SMU	RS09275	WP	002262344.1	GQDDAVSSISRAIRRNQSGIRVGRPIGSFIFLGPTGVGKTEL	AKALAEVLFDDESA	LIRFDMSEYMEKFAA	SRLNGAPP	598
NTDB	id	297	STER	RS00545	WP	011680614.1	GQDEAVSAISRAIRRNQSGIRITGKRPIGSFMFLGPTGVGKTEL	AKALAEVLFDDESA	LLRFDMSEYMEKFAA	SRLNGAPP	601
NTDB	id	329	STU	RS10020	WP	011225298.1	GQDEAVSAISRAIRRNQSGIRITGKRPIGSFMFLGPTGVGKTEL	AKALAEVLFDDESA	LLRFDMSEYMEKFAA	SRLNGAPP	601
consensus							!!*!* * ** * ! ! *	! * * ! * ! * ! * ! * ! * ! * ! * ! * ! * ! *	* * ! ! * ! !	601	

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NTDB id 601 KW2 RS02615 WP 021036805.1	VDLGYNPAMGARPLRRTIQENTEDSLADFYIEHPEYKQ.LVADLIDDKIVISNQTQETAETTTDEEVPAE	748
NTDB id 378 SMU RS02690 WP 002263569.1	VDLGYDPKMGARPLRRTIQEHIETDITDFYLEHPEQKE.LKAITMTSNCKIVIKASNK.VETVTKATSD.	753
NTDB id 281 KZH43 RS03550 WP 000882517.1	VDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKD.LKAVMTSKCNIQIKSAKK.AEVKSSEKEK.	752
NTDB id 245 SPD RS03860 WP 000882517.1	VDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKD.LKAVMTSKCNIQIKSAKK.AEVKSSEKEK.	752
NTDB id 243 SPR RS03635 WP 000882517.1	VDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKD.LKAVMTSKCNIQIKSAKK.AEVKSSEKEK.	752
NTDB id 241 SP RS04015 WP 000882523.1	VDLGYDPKMGARPLRRTIQDYIEDTITDYYLENPSEKD.LKAVMTSKCNIQIKSAKK.AEVKSSEKEK.	752
NTDB id 85 BSU 00860 NP 387967.1	AEEGVLDLEYGARPLRRAIQKHVEDRLSEELRLGNTHKQQHIVLDVEDGEFVVVKTAKTN.....	810
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consensus	* !*****!!!!!!*!! *!! *** * * * * * * * * *	

- non conserved
- similar
- ≥ 50% conserved