

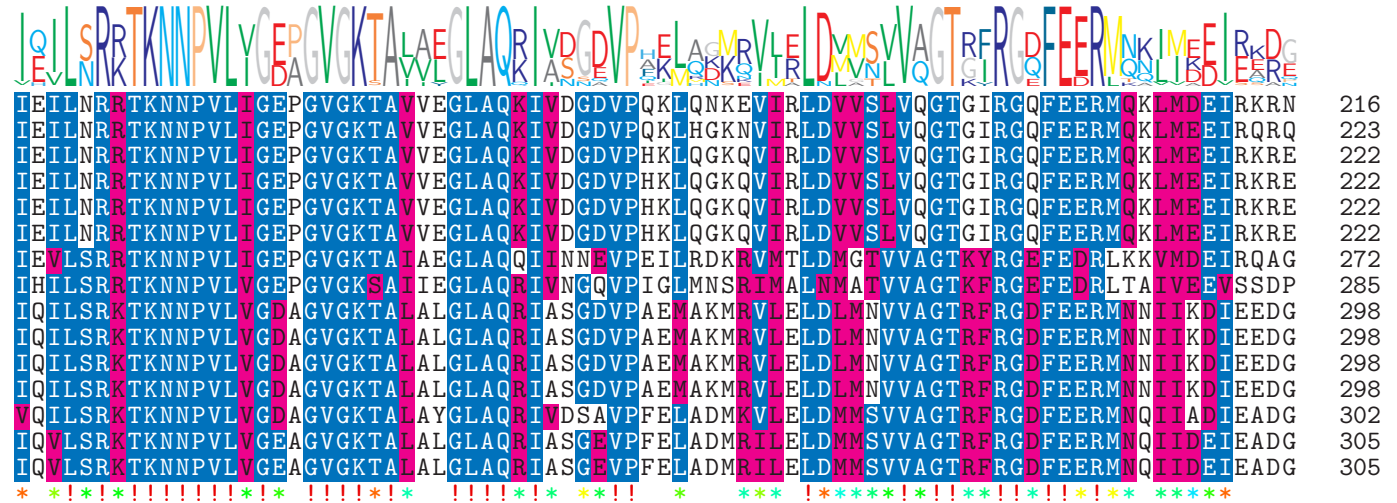
NTDB id	601	KW2	RS02615	WP	021036805.1	MLCQNCNINEA.....	11
NTDB id	378	SMU	RS02690	WP	002263569.1	MLCQNCKINEA.....	11
NTDB id	281	KZH43	RS03550	WP	000882517.1	MLCQNCKINDS.....	11
NTDB id	245	SPD	RS03860	WP	000882517.1	MLCQNCKINDS.....	11
NTDB id	243	SPR	RS03635	WP	000882517.1	MLCQNCKINDS.....	11
NTDB id	241	SP	RS04015	WP	000882523.1	MLCQNCKINDS.....	11
NTDB id	85	BSU	O0860	NP	387967.1	..MMFGRFTERAQKVLALAQEEALRLGHNNIGTEHLLGLVREGEGIAAKALQALGLGSEKIQKEVESLI.....GR	70
NTDB id	610	V4T04	RS10165	WP	012897346.1	MKFENIKYPTLDRILEKAEEYAHQYQYGTTESAHLLAAMATTSGSIAYSLLAGMNVDSDDLII.....DLEDLSSH	72
NTDB id	287	SP	RS11210	WP	001109712.1	MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE....EVALELTETDYS	70
NTDB id	106550	AABA16	RS10450	WP	001109697.1	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	377	SMU	RS09275	WP	002262344.1	MTDYSLKMQEVRFLAQFEAAERFESSYLESWHVILLAMVEIDSSVAGLSFAEFEADVRFEDYQAAAAILAIGKKPKSSS	76
NTDB id	297	STER	RS00545	WP	011680614.1	MTIYSRKMQAIFHRAQLEAERFESPFIETWHVILLAMVEVTGSVAYLTFDTDFEDRIHSEEIETA AVLAMEKRPKDLS	76
NTDB id	329	STU	RS10020	WP	011225298.1	MTIYSRKMQAIFHRAQLEAERFESPFIETWHVILLAMVEVPGSVAYLTFDTDFEDRIHSEEIETA AVLAMEKRPKDLS	76
consensus						*** ** **** ***	

NTDB id 601 KW2 RS02615 WP 021036805.1	...TIHLYTSVNGQKKQIDLCQNCYQI...MKS	GGREALFGAGNASNGNSDE.....PFNP.FND	IFSAIQGQ	72
NTDB id 378 SMU RS02690 WP 002263569.1	...TIHLYANVNGQKKQIDLCQNCYQI...MKTDP	ENGPLNHLSQQNSSS.....INPFFDDFFGDLN	NF	70
NTDB id 281 KZH43 RS03550 WP 000882517.1	...TIHLYTNLNGKQKQIDLCQNCYKI...IKTDP	NNSLFKGMTDLN	NRD.....FDP.FGDFFN	DLN
NTDB id 245 SPD RS03860 WP 000882517.1	...TIHLYTNLNGKQKQIDLCQNCYKI...IKTDP	NNSLFKGMTDLN	NRD.....FDP.FGDFFN	DLN
NTDB id 243 SPR RS03635 WP 000882517.1	...TIHLYTNLNGKQKQIDLCQNCYKI...IKTDP	NNSLFKGMTDLN	NRD.....FDP.FGDFFN	DLN
NTDB id 241 SP RS04015 WP 000882523.1	...TIHLYTNLNGKQKQIDLCQNCYKI...IKTDP	NNSLFKGMTDLN	NRD.....FDP.FGDFFN	DLN
NTDB id 85 BSU 00860 NP 387967.1	GQEMSQTIHYTPRAKKVIELSMDEARKLGHSYV	GTEHLLGLIREGEGVAARVLNNLGVSLNKARQ	QVLQL.....	141
NTDB id 610 V4T04 RS10165 WP 012897346.1	VKVKRSTLRFSPRAFEVMTAASFLAIHNNSEAV	GTEHLLYALLQVEDGFGQLLKL.....QKINIV	SRKET	143
NTDB id 287 SP RS11210 WP 001109712.1	QDETFTELPSRRRLQVLFDAAEYVASVHAKVL	GTEHVLAYILHDGNALATRIERAGFSYEDKKD	QVKIAALRRN	LEER
NTDB id 106550 AABA16 RS10450 WP 001109697.1	QDETFTELPSRRRLQVLFDAAEYVASVHAKVL	GTEHVLAYILHDGNALATRIERAGFSYEDKKD	QVKIAALRRN	LEER
NTDB id 290 KZH43 RS10025 WP 001109677.1	QDETFTELPSRRRLQVLFDAAEYVASVHAKVL	GTEHVLAYILHDGNALATRIERAGFSYEDKKD	QVKIAALRRN	LEER
NTDB id 289 SPD RS10700 WP 001109677.1	QDETFTELPSRRRLQVLFDAAEYVASVHAKVL	GTEHVLAYILHDGNALATRIERAGFSYEDKKD	QVKIAALRRN	LEER
NTDB id 377 SMU RS09275 WP 002262344.1	N..DTMLAQSHALKRTLAEEAAISQVTHAKEV	GTEHVLFAMLNPNLLATRIELVGFHAKDDGES	IRLLDRKVT	ERY
NTDB id 297 STER RS00545 WP 011680614.1	ESDIIDLRQAQSPALEAMLEAQEIASVTGAVE	VGSEHVLMAFLHKKDLMVCRILEVAGFYQKDD	SDKPRIIDRRS	LERN
NTDB id 329 STU RS10020 WP 011225298.1	ESDIIDLRQAQSPALEAMLEAQEIASVTGAVE	VGSEHVLMAFLHKKDLMVCRILEVAGFYQKDD	SDKPRIIDRRS	LERN
consensus	*** * * * * *	***** * * * *	*** *	

```

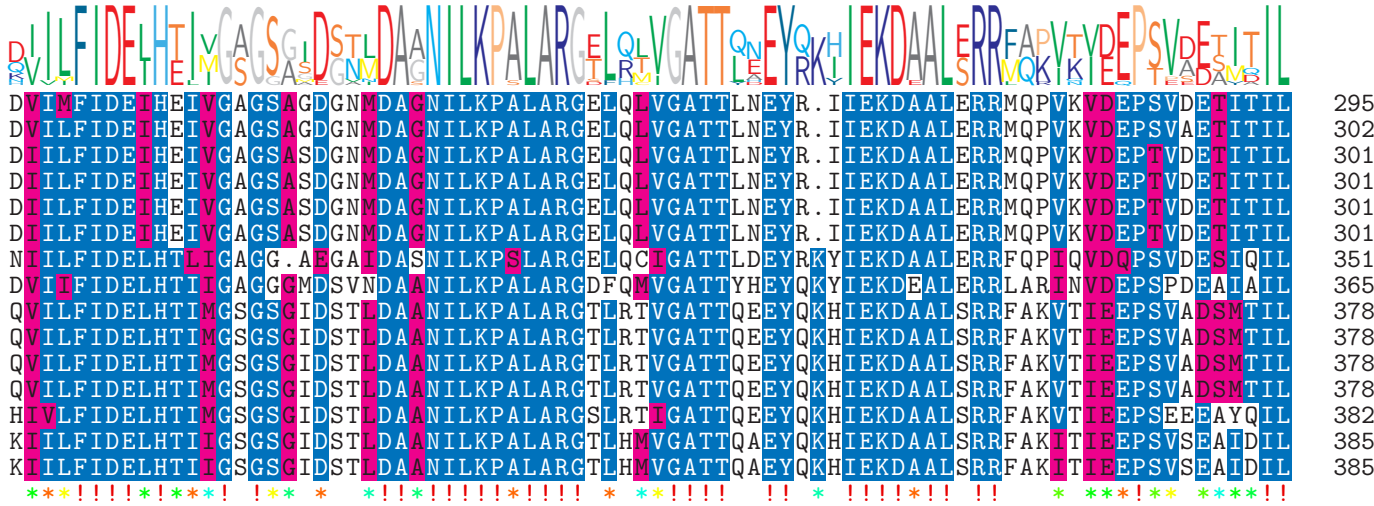
NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 281 KZH43 RS03550 WP 000882517.1
NTDB id 245 SPD RS03860 WP 000882517.1
NTDB id 243 SPR RS03635 WP 000882517.1
NTDB id 241 SP RS04015 WP 000882523.1
NTDB id 85 BSU 00860 NP 387967.1
NTDB id 610 V4T04 RS10165 WP 012897346.1
NTDB id 287 SP RS11210 WP 001109712.1
NTDB id 106550 AABA16 RS10450 WP 001109697.1
NTDB id 290 KZH43 RS10025 WP 001109677.1
NTDB id 289 SPD RS10700 WP 001109677.1
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

```



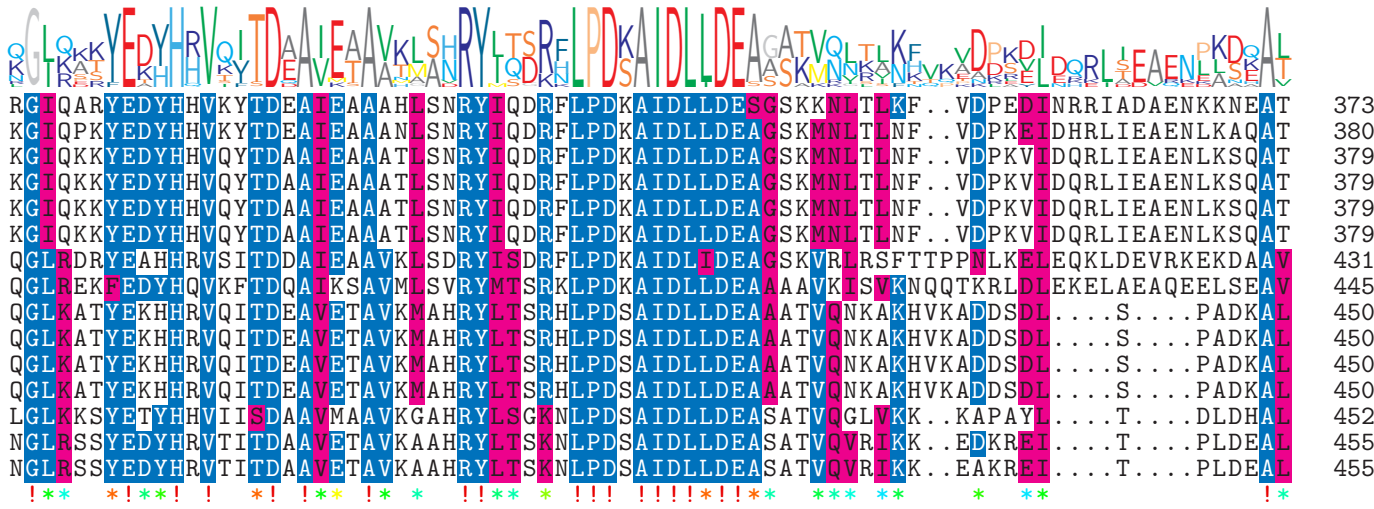
logo

NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 378 SMU RS02690 WP 002263569.1
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 241 SP RS04015 WP 000882523.1
NTDB id 85 BSU 00860 NP 387967.1
NTDB id 610 V4T04 RS10165 WP 012897346.1
NTDB id 287 SP RS11210 WP 001109712.1
NTDB id 106550 AABA16 RS10450 WP 001109697.1
NTDB id 290 KZH43 RS10025 WP 001109677.1
NTDB id 289 SPD RS10700 WP 001109677.1
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



logo

NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 378 SMU RS02690 WP 002263569.1
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 241 SP RS04015 WP 000882523.1
NTDB id 85 BSU 00860 NP 387967.1
NTDB id 610 V4T04 RS10165 WP 012897346.1
NTDB id 287 SP RS11210 WP 001109712.1
NTDB id 106550 AABA16 RS10450 WP 001109697.1
NTDB id 290 KZH43 RS10025 WP 001109677.1
NTDB id 289 SPD RS10700 WP 001109677.1
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



NTDB	id	601	KW2	RS02615	WP	021036805.1	KAEDFEKAAHFRDQISKRLRELKQK.....EVTDEDMPVITEKDI	TEQIVEQKIQTPVGD	LKEKEQTQLINLAD	DLKAHVI	447	
NTDB	id	378	SMU	RS02690	WP	002263569.1	RDEDEYKAAAYFRDQIAKYKEMQSA.....KLDKENTPVITEKN	IEVIVEQKTNIPVGEL	KEKEQSQLIHLADD	LKTRVI	454	
NTDB	id	281	KZH43	RS03550	WP	000882517.1	REEDFEKAAAYFRDQIAKYKEMQKK.....KITDQDTPIISEKT	IEHIEEQKTNIPVGD	LKEKEQSQLIHLAED	LKSHVI	453	
NTDB	id	245	SPD	RS03860	WP	000882517.1	REEDFEKAAAYFRDQIAKYKEMQKK.....KITDQDTPIISEKT	IEHIEEQKTNIPVGD	LKEKEQSQLIHLAED	LKSHVI	453	
NTDB	id	243	SPR	RS03635	WP	000882517.1	REEDFEKAAAYFRDQIAKYKEMQKK.....KITDQDTPIISEKT	IEHIEEQKTNIPVGD	LKEKEQSQLIHLAED	LKSHVI	453	
NTDB	id	241	SP	RS04015	WP	000882523.1	REEDFEKAAAYFRDQIAKYKEMQKK.....KITDQDTPSISEKT	IEHIEEQKTNIPVGD	LKEKEQSQLIHLAED	LKSHVI	453	
NTDB	id	85	BSU	00860	NP	387967.1	QSQEFEEKAAASLRDTEQRLREQVEDTKKSWKEKQGQENSEVTVDD	LIAMVVSSTGVPVSKI	IAQTETDKLLNMENI	LHSRVI	511	
NTDB	id	610	V4T04	RS10165	WP	012897346.1	IKLIDIKASRTKEKAVEKIADKIYKF.....SVKEDKRQEVTDQA	VVAVASTLTGVPITQ	MTKSESDRLINLEKE	ELHKRV	520	
NTDB	id	287	SP	RS11210	WP	001109712.1	MDGKWKQAAQLIAKE.....E.....EVPV.YKDLVTESD	ILTTLSRLSGIPVQKL	TQTDACKYLNLEAE	LHKRVI	515	
NTDB	id	106550	AABA16	RS10450	WP	001109697.1	MDGKWKQAAQLIAKE.....E.....EVPV.YKDLVTESD	ILTTLSRLSGIPVQKL	TQTDACKYLNLEAE	LHKRVI	515	
NTDB	id	290	KZH43	RS10025	WP	001109677.1	MDGKWKQAAQLIAKE.....E.....EVPV.YKDLVTESD	ILTTLSRLSGIPVQKL	TQTDACKYLNLEAE	LHKRVI	515	
NTDB	id	289	SPD	RS10700	WP	001109677.1	MDGKWKQAAQLIAKE.....E.....EVPV.YKDLVTESD	ILTTLSRLSGIPVQKL	TQTDACKYLNLEAE	LHKRVI	515	
NTDB	id	377	SMU	RS09275	WP	002262344.1	ITNDYQLAKRLLKKE.....K.....KPLLKKRAEVKEED	ILATLSKLSGIPVKKL	TQADSKKYNLEREL	LHKRVI	518	
NTDB	id	297	STER	RS00545	WP	011680614.1	ISGDIGAIVKQYKAN.....Q.....KAKFPKPAIVDADQ	IMQTL	SRLSGIPVEKMTQT	DSKRYLNLESEL	LHKRVI	521
NTDB	id	329	STU	RS10020	WP	011225298.1	ISGDIGAIVKQYKAN.....Q.....KAKFPKPAIVDADQ	IMQTL	SRLSGIPVEKMTQT	DSKRYLNLESEL	LHKRVI	521
consensus							* * * *	*	***** *	***** ! * *	***** ! * ! *	

NTDB id	601	KW2	RS02615	WP	021036805.1	GQDEAVDKISKAIRRNRVGLGKPNRPIGSFLFVGPTGVGKTTELAKQLAKELFSGSESIRFDMSEYMEKHSVAKLIGAPP	527
NTDB id	378	SMU	RS02690	WP	002263569.1	GQDAAVDKIATAIRRNRRVGLGTNPNRPIGSFLFVGPTGVGKTTELAKQLAIELFGSEDSSMIRFDMSEYMEKHAVA AKLVGAPP	534
NTDB id	281	KZH43	RS03550	WP	000882517.1	GQDDAVDKIATAIRRNRRVGLGTNPNRPIGSFLFVGPTGVGKTTELAKQLAIELFGSADSMIRFDMSEYMEKHSVA KLVGAPP	533
NTDB id	245	SPD	RS03860	WP	000882517.1	GQDDAVDKIATAIRRNRRVGLGTNPNRPIGSFLFVGPTGVGKTTELAKQLAIELFGSADSMIRFDMSEYMEKHSVA KLVGAPP	533
NTDB id	243	SPR	RS03635	WP	000882517.1	GQDDAVDKIATAIRRNRRVGLGTNPNRPIGSFLFVGPTGVGKTTELAKQLAIELFGSADSMIRFDMSEYMEKHSVA KLVGAPP	533
NTDB id	241	SP	RS04015	WP	000882523.1	GQDDAVDKIATAIRRNRRVGLGTNPNRPIGSFLFVGPTGVGKTTELAKQLAIELFGSADSMIRFDMSEYMEKHSVA KLVGAPP	533
NTDB id	85	BSU	O0860	NP	387967.1	GQDEAVVA VAKAVRRARAGLKDPKRPIGSFIIFLGPTGVGKTTELAKALAE SIFGDES MIRIDMSEYMEKHST SRLVGSPP	591
NTDB id	610	V4T04	RS10165	WP	012897346.1	GQEFAISA VSRARRARS GVADSRP MGSFM FLGPTGVGKTTELAKALADS VFGEEDNMIRVDMSE FMEKHST SRLIGAPP	600
NTDB id	287	SP	RS11210	WP	001109712.1	GQDQAVSSISRARRNQSGIRSHKRPISGFMLFGPTGVGKTTELAKALA EV LFDD ESALIRFDMSEYMEKFAA SRLNGAPP	595
NTDB id	106550	AABA16	RS10450	WP	001109697.1	GQDQAVSSISRARRNQSGIRSHKRPISGFMLFGPTGVGKTTELAKALA EV LFDD ESALIRFDMSEYMEKFAA SRLNGAPP	595
NTDB id	290	KZH43	RS10025	WP	001109677.1	GQDQAVSSISRARRNQSGIRSHKRPISGFMLFGPTGVGKTTELAKALA EV LFDD ESALIRFDMSEYMEKFAA SRLNGAPP	595
NTDB id	289	SPD	RS10700	WP	001109677.1	GQDQAVSSISRARRNQSGIRSHKRPISGFMLFGPTGVGKTTELAKALA EV LFDD ESALIRFDMSEYMEKFAA SRLNGAPP	595
NTDB id	377	SMU	RS09275	WP	002262344.1	GQDDAVSSISRARRNQSGIRVGRPIGSFMFLGPTGVGKTTELAKALA EV LFDD ESALIRFDMSEYMEKFAA SRLNGAPP	598
NTDB id	297	STER	RS00545	WP	011680614.1	GQDEAVSA ISRARRNQSGIRTGKRPIGSFMFLGPTGVGKTTELAKALA EV LFDD ESALLRFDMSEYMEKFAA SRLNGAPP	601
NTDB id	329	STU	RS10020	WP	011225298.1	GQDEAVSA ISRARRNQSGIRTGKRPIGSFMFLGPTGVGKTTELAKALA EV LFDD ESALLRFDMSEYMEKFAA SRLNGAPP	601
consensus						! ! * * ! * * * * ! * ! ! * ! * * ! * ! * ! * ! * ! * ! * ! * ! * ! * ! * ! * ! * * * * * * ! * ! * ! * ! * ! * ! * ! *	


```

NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 378 SMU RS02690 WP 002263569.1
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 241 SP RS04015 WP 000882523.1
NTDB id 85 BSU 00860 NP 387967.1
NTDB id 610 V4T04 RS10165 WP 012897346.1
NTDB id 287 SP RS11210 WP 001109712.1
NTDB id 106550 AABA16 RS10450 WP 001109697.1
NTDB id 290 KZH43 RS10025 WP 001109677.1
NTDB id 289 SPD RS10700 WP 001109677.1
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

```

