

logo

NTDB id 601 KW2 RS02615 WP 021036805.1	MLCQNCNINEAT.....I	13
NTDB id 281 KZH43 RS03550 WP 000882517.1	MLCQNCNKINDST.....I	13
NTDB id 245 SPD RS03860 WP 000882517.1	MLCQNCNKINDST.....I	13
NTDB id 243 SPR RS03635 WP 000882517.1	MLCQNCNKINDST.....I	13
NTDB id 241 SP RS04015 WP 000882523.1	MLCQNCNKINDST.....I	13
NTDB id 137341 SD89 RS06540 WP 053308495.1	MLCQNCNINEST.....I	13
NTDB id 378 SMU RS02690 WP 002263569.1	MLCQNCNKINEAT.....I	13
NTDB id 85 BSU 00860 NP 387967.1	..MMFGRFTEAQQVLALAQEEALRLGHNNIGTEHILLGLVREGGIAAKALQALGLGSEKIQKEVESLIG.....RGQEMS	75
NTDB id 610 V4T04 RS10165 WP 012897346.1	MKFENIKYTPTLDRILEKAEEYAHQYQYGTIESAHLAAMATTSGSIAYSLLAGMNVDSDDLIDL.....EDLSSHVKVKR	77
NTDB id 290 KZH43 RS10025 WP 001109677.1	MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNSHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET	75
NTDB id 289 SPD RS10700 WP 001109677.1	MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNSHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET	75
NTDB id 287 SP RS11210 WP 001109712.1	MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNSHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET	75
NTDB id 377 SMU RS09275 WP 002262344.1	MTDYSLKMQEVFRLAQFEAARFESSYLESWHVLLAMVEIDSSVAGLSFAEFADVRFEDYQAAAAILAIGKKPKSSSN..D	79
NTDB id 297 STER RS00545 WP 011680614.1	MTIYSRKMQAIFHRAQLEAERFESPFLWTWHVLLAMVEVTGSVAYLTFTDFEDRIHSEEIETA AVLAMEKRPKDLSESDI	81
NTDB id 329 STU RS10020 WP 011225298.1	MTIYSRKMQAIFHRAQLEAERFESPFLWTWHVLLAMVEVPGSVAYLTFTDFEDRIHSEEIETA AVLAMEKRPKDLSESDI	81
consensus	* * * *	

logo

NTDB id 601 KW2 RS02615 WP 021036805.1	HLYTSVNGCQKQIDLCQNCYQI...MKSGGQEAALFGAGNASNGNS.....DEPFN.PFNDIFSALQGGQ.DFNGAASNQ	81
NTDB id 281 KZH43 RS03550 WP 000882517.1	HLYTNLNGKQKQIDLCQNCYKI...IKTDPNNSLFKGMTDLN.....NRDF.DPFGDFFNDLNNFRPSSN..TPP	77
NTDB id 245 SPD RS03860 WP 000882517.1	HLYTNLNGKQKQIDLCQNCYKI...IKTDPNNSLFKGMTDLN.....NRDF.DPFGDFFNDLNNFRPSSN..TPP	77
NTDB id 243 SPR RS03635 WP 000882517.1	HLYTNLNGKQKQIDLCQNCYKI...IKTDPNNSLFKGMTDLN.....NRDF.DPFGDFFNDLNNFRPSSN..TPP	77
NTDB id 241 SP RS04015 WP 000882523.1	HLYTNLNGKQKQIDLCQNCYKI...IKTDPNNSLFKGMTDLN.....NRDF.DPFGDFFNDLNNFRPSSN..TPP	77
NTDB id 137341 SD89 RS06540 WP 053308495.1	HLYTSVNGKQKQVLDLCQNCYQI...MKSDPANSLNGLTPGYRAQ.....DRSTSPFFDDFFGDLLNNFRAFNG..LPN	81
NTDB id 378 SMU RS02690 WP 002263569.1	HLYANVNGCQKQIDLCQNCYQI...MKTDPENGPLNHLSQQ...N.....SSSINPFDDFFGDLLNNFRAFNNQDLPN	80
NTDB id 85 BSU 00860 NP 387967.1	QTIHYTPRAKKVIELSMDEARKLGHSYVGTEHILLGLIREGEGVAARVLNNLGVSLNKKARQQVLQL.....LGSNET....	147
NTDB id 610 V4T04 RS10165 WP 012897346.1	STLRFSPRAEEVMTAASFLAIHNNSEAVGTEHLLYALLQVEDGFGFLQLLKL.....QKINIVSLRKLEKRTGLKVPESSK	153
NTDB id 290 KZH43 RS10025 WP 001109677.1	TELPFSRRLQILFDEAEYVASVVHAKVLGTEHVLVAILHDGNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA	160
NTDB id 289 SPD RS10700 WP 001109677.1	TELPFSRRLQILFDEAEYVASVVHAKVLGTEHVLVAILHDGNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA	160
NTDB id 287 SP RS11210 WP 001109712.1	TELPFSRRLQVLFDEAEYVASVVHAKVLGTEHVLVAILHDSNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA	160
NTDB id 377 SMU RS09275 WP 002262344.1	MLLEQSHALKRTLAEEAAISQVTHAKEVGTEHVLFAMLLNPNLLATRILELVGFHAKDDGESIRLLDLRKVTIERYACFSKEDIKA	164
NTDB id 297 STER RS00545 WP 011680614.1	DLRAQSPALEAMLQEAQEIASVTGAVEVGSEHVLMAFLLHKDLMVCRLLEVAGFQYKDDSDKPRIIDLRRSLERNAGLSKQDLKA	166
NTDB id 329 STU RS10020 WP 011225298.1	DLRAQSPALEAMLQEAQGIASVTGAVEVGSEHVLMAFLLHKDLMVCRLLEVAGFQYKDDSDKPRIIDLRRSLERNAGLSKQDLKA	166
consensus	* * * * * * * * * * * * * *	

logo

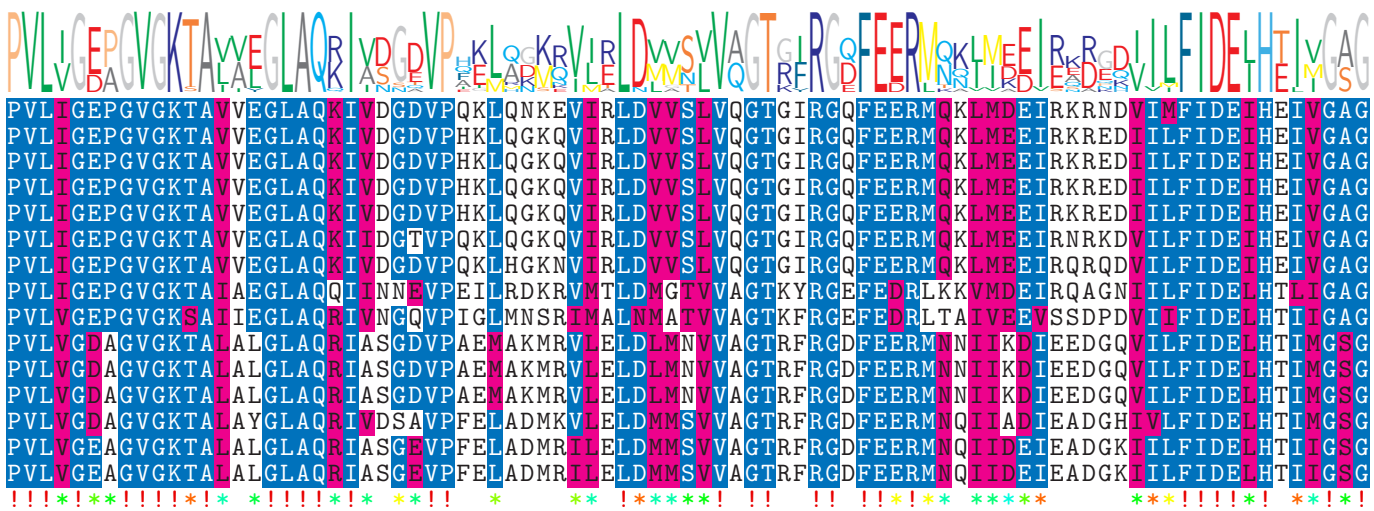
NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 281 KZH43 RS03550 WP 000882517.1
NTDB id 245 SPD RS03860 WP 000882517.1
NTDB id 243 SPR RS03635 WP 000882517.1
NTDB id 241 SP RS04015 WP 000882523.1
NTDB id 137341 SD89 RS06540 WP 053308495.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 85 BSU 00860 NP 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



147
153
153
153
153
160
154
203
216
229
229
229
233
236
236

logo

NTDB id 601 KW2 RS02615 WP 021036805.1
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 137341 SD89 RS06540 WP 053308495.1
NTDB id 378 SMU RS02690 WP 002263569.1
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

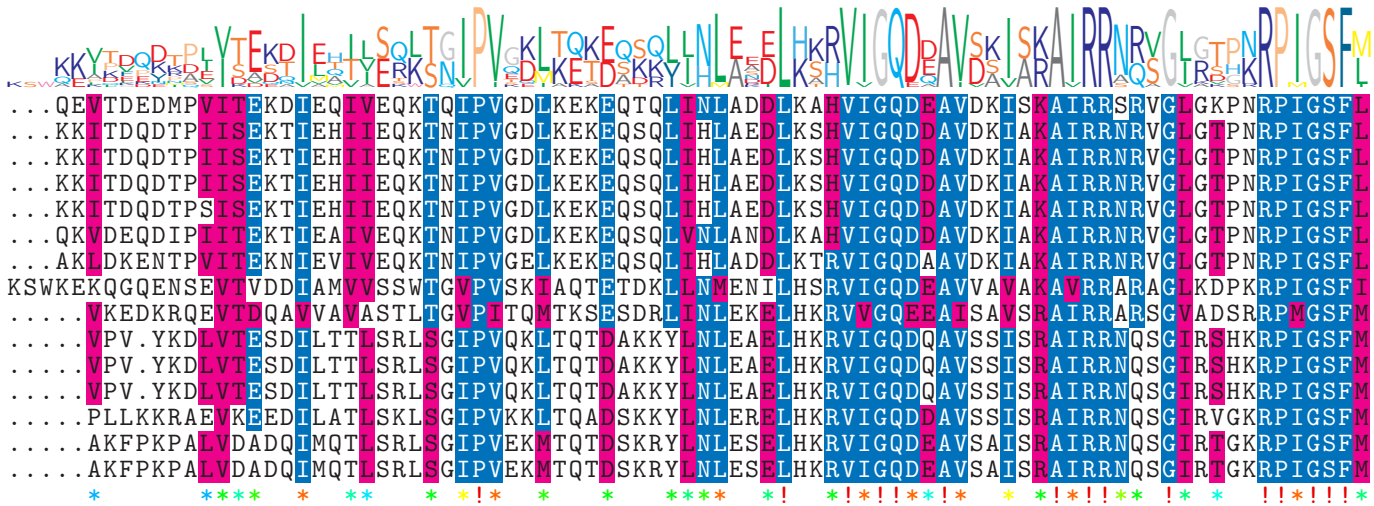


232
238
238
238
238
245
239
288
301
314
314
314
318
321
321

NTDB	id	601	KW2	RS02615	WP	021036805.1	AAAHLSNRYI	QDRFLPDKAIDLLDEAG	SKMNLTLKF..	VDPEDINRRI	AD	AENKKNEA	TKAEDFEKA	AHFRDQISK	LR	ELQK...	396							
NTDB	id	281	KZH43	RS03550	WP	000882517.1	AAATLSNRYI	QDRFLPDKAIDLLDEAG	SKMNLTLNF..	VDPKVIDQRL	IE	AENLKSQA	TR	EEDFEKA	AYFRDQIA	KYKEMQK...	402							
NTDB	id	245	SPD	RS03860	WP	000882517.1	AAATLSNRYI	QDRFLPDKAIDLLDEAG	SKMNLTLNF..	VDPKVIDQRL	IE	AENLKSQA	TR	EEDFEKA	AYFRDQIA	KYKEMQK...	402							
NTDB	id	243	SPR	RS03635	WP	000882517.1	AAATLSNRYI	QDRFLPDKAIDLLDEAG	SKMNLTLNF..	VDPKVIDQRL	IE	AENLKSQA	TR	EEDFEKA	AYFRDQIA	KYKEMQK...	402							
NTDB	id	241	SP	RS04015	WP	000882523.1	AAATLSNRYI	QDRFLPDKAIDLLDEAG	SKMNLTLNF..	VDPKVIDQRL	IE	AENLKSQA	TR	EEDFEKA	AYFRDQIA	KYKEMQK...	402							
NTDB	id	137341	SD89	RS06540	WP	053308495.1	AAAHLSNRYI	QDRFLPDKAIDLLDEAG	SKMNLTLNF..	VDPKEIDKRL	IE	AENLKAQA	TR	EDYER	AAAYFRDQIT	KYKEMQA...	409							
NTDB	id	378	SMU	RS02690	WP	002263569.1	AAANLSNRYI	QDRFLPDKAIDLLDEAG	SKMNLTLNF..	VDPKEIDHRL	IE	AENLKAQA	TR	EDYEKA	AYFRDQIA	KYKEMQS...	403							
NTDB	id	85	BSU	00860	NP	387967.1	AAVKLSDRYI	SDRFLPDKAIDLIDEAG	SKVRLRSFTTPP	NLKELEQKLD	EV	RKEKDA	AV	QSSEFEKA	ASLRDTEQR	LR	EQVEDTK	457						
NTDB	id	610	V4T04	RS10165	WP	012897346.1	SAVMLSVRMY	TSRKLDPDKAIDLLDEAA	AAVKISVKNQQT	KRLDLEKELAE	AQEELSE	AVIKL	DIKA	SRTKEKAVE	KIAD	KIYKFS	471							
NTDB	id	290	KZH43	RS10025	WP	001109677.1	TAVKMAHRYL	TSRHLPDSAIDLLDEAA	ATVQNKAKHVKA	DDSDL....	S....	PADKALMD	GKWKQA	AAQLIAKEE		E	467							
NTDB	id	289	SPD	RS10700	WP	001109677.1	TAVKMAHRYL	TSRHLPDSAIDLLDEAA	ATVQNKAKHVKA	DDSDL....	S....	PADKALMD	GKWKQA	AAQLIAKEE		E	467							
NTDB	id	287	SP	RS11210	WP	001109712.1	TAVKMAHRYL	TSRHLPDSAIDLLDEAA	ATVQNKAKHVKA	DDSDL....	S....	PADKALMD	GKWKQA	AAQLIAKEE		E	467							
NTDB	id	377	SMU	RS09275	WP	002262344.1	AAVKGAHRYL	SGKNLPD	SAIDLLDEASATV	QGLVKK..	KAPAYL....	T...	DL	DHALITNDY	QLAKRLLKKEK		K	469						
NTDB	id	329	STER	RS00545	WP	011680614.1	TAVKMAHRYL	TSKNLPD	SAIDLLDEASATV	QVRIKK..	EDKREI....	T...	PL	DEALISGD	DIGAAVKQYKANQ		K	472						
NTDB	id	297	STU	RS10020	WP	011225298.1	TAVKMAHRYL	TSKNLPD	SAIDLLDEASATV	QVRIKK..	EAKREI....	T...	PL	DEALISGD	DIGAAVKQYKANQ		K	472						
consensus							* !	**	! ! *	*	! ! ! ! !	* ! ! ! !	* *	***	*	***	*	*	!	*	**	*	*	*

logo

NTDB id 601 KW2 RS02615 WP 021036805.1
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 137341 SD89 RS06540 WP 053308495.1
NTDB id 378 SMU RS02690 WP 002263569.1
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



478
484
484
484
484
491
485
542
551
546
546
546
549
552
552

logo

NTDB id 601 KW2 RS02615 WP 021036805.1
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 137341 SD89 RS06540 WP 053308495.1
NTDB id 378 SMU RS02690 WP 002263569.1
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

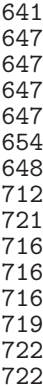


563
569
569
569
569
576
570
627
636
631
631
631
634
637
637

```

NTDB id 601 KW2 RS02615 WP 021036805.1
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 137341 SD89 RS06540 WP 053308495.1
NTDB id 378 SMU RS02690 WP 002263569.1
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

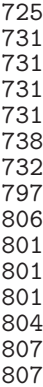
```



```

NTDB id 601 KW2 RS02615 WP 021036805.1
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 137341 SD89 RS06540 WP 053308495.1
NTDB id 378 SMU RS02690 WP 002263569.1
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

```



logo

NTDB id 601 KW2 RS02615 WP 021036805.1	DKI	V	I	S	N	Q	T	Q	E	A	E	T	T	D	E	E	V	P	A	E	748	
NTDB id 281 KZH43 RS03550 WP 000882517.1	K	G	N	I	Q	I	K	S	A	K	K	A	E	V	K	S	S	E	K	E	752	
NTDB id 245 SPD RS03860 WP 000882517.1	K	G	N	I	Q	I	K	S	A	K	K	A	E	V	K	S	S	E	K	E	752	
NTDB id 243 SPR RS03635 WP 000882517.1	K	G	N	I	Q	I	K	S	A	K	K	A	E	V	K	S	S	E	K	E	752	
NTDB id 241 SP RS04015 WP 000882523.1	K	G	N	I	Q	I	K	S	A	K	K	A	E	V	K	S	S	E	K	E	752	
NTDB id 137341 SD89 RS06540 WP 053308495.1	S	E	S	I	T	I	K	A	V	K	E	G	D	S	F	L	N	E	E	S	L	760
NTDB id 378 SMU RS02690 WP 002263569.1	N	G	K	I	V	I	K	A	S	N	K	V	E	T	V	T	K	A	T	S	D	753
NTDB id 85 BSU 00860 NP 387967.1	D	G	E	F	V	V	K	T	T	A	K	T	N	.	.	.	.	.	.	.	.	810
NTDB id 610 V4T04 RS10165 WP 012897346.1	N	K	K	I	K	I	A	Q	I	V	.	.	.	.	.	.	.	.	.	.	816	
NTDB id 290 KZH43 RS10025 WP 001109677.1	A	G	Q	L	K	F	D	I	A	.	.	.	.	.	.	.	.	.	.	.	810	
NTDB id 289 SPD RS10700 WP 001109677.1	A	G	Q	L	K	F	D	I	A	.	.	.	.	.	.	.	.	.	.	.	810	
NTDB id 287 SP RS11210 WP 001109712.1	A	G	Q	L	K	F	D	I	A	.	.	.	.	.	.	.	.	.	.	.	810	
NTDB id 377 SMU RS09275 WP 002262344.1	K	E	K	L	K	F	D	I	V	.	.	.	.	.	.	.	.	.	.	.	813	
NTDB id 297 STER RS00545 WP 011680614.1	K	D	K	L	T	F	T	V	V	.	.	.	.	.	.	.	.	.	.	.	816	
NTDB id 329 STU RS10020 WP 011225298.1	K	D	K	L	T	F	T	V	V	.	.	.	.	.	.	.	.	.	.	.	816	
consensus	*	*																				

- ⓧ non conserved
- ✖ similar
- ⓧ ≥ 50% conserved