

logo

NTDB id 84079 JG741 RS05730 WP 011675568.1	MLCQNCNINEA.....TI	13
NTDB id 601 KW2 RS02615 WP 021036805.1	MLCQNCNINEA.....TI	13
NTDB id 378 SMU RS02690 WP 002263569.1	MLCQNCNINEA.....TI	13
NTDB id 281 KZH43 RS03550 WP 000882517.1	MLCQNCNINEA.....TI	13
NTDB id 245 SPD RS03860 WP 000882517.1	MLCQNCNINEA.....TI	13
NTDB id 243 SPR RS03635 WP 000882517.1	MLCQNCNINEA.....TI	13
NTDB id 241 SP RS04015 WP 000882523.1	MLCQNCNINEA.....TI	13
NTDB id 85 BSU 00860 NP 387967.1	..MMFGRFTEAQQVLALAQEEALRLGHNNIGTEHILLGLVREGGIAAKALQALGLGSEKIQKEVESLIG.....RQGEMS	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	MTDYSCLKMQEVFRLAQFEAARFESSYLESWHVLLAMVEIDSSVAGLSFAEFADRVFEDYQAAAAILAIGKKPKSSSN..DI	79
NTDB id 297 STER RS00545 WP 011680614.1	MTIYSRKMQAIFHRAQLEAERFESPFLFTWHVLLAMVEVPGSVAYLTFTDFEDRIHSEEIETA AVLAMEKRPKDLSESDI	81
NTDB id 329 STU RS10020 WP 011225298.1	MTIYSRKMQAIFHRAQLEAERFESPFLFTWHVLLAMVEVPGSVAYLTFTDFEDRIHSEEIETA AVLAMEKRPKDLSESDI	81
consensus	* * * *	

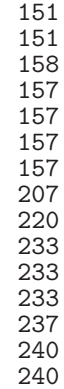
logo

NTDB id 84079 JG741 RS05730 WP 011675568.1	HLYTSVNGQKKQIDLCQNCYQ...IMKSGGQEAALFGAGNASNGNSDEP.....FNP.FNDIFSALQGGQ.DFNGAASN.	80
NTDB id 601 KW2 RS02615 WP 021036805.1	HLYTSVNGQKKQIDLCQNCYQ...IMKSGGQEAALFGAGNASNGNSDEP.....FNP.FNDIFSALQGGQ.DFNGAASN.	80
NTDB id 378 SMU RS02690 WP 002263569.1	HLYANVNGQKKQIDLCQNCYQ...IMKTDPENGPLNHLISQQNSSS.....INPFDDFFGDLNNFRAFNNDLP.	79
NTDB id 281 KZH43 RS03550 WP 000882517.1	HLYTNLNGKQKQIDLCQNCYK...IKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNFRPSSN..TP.	76
NTDB id 245 SPD RS03860 WP 000882517.1	HLYTNLNGKQKQIDLCQNCYK...IKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNFRPSSN..TP.	76
NTDB id 243 SPR RS03635 WP 000882517.1	HLYTNLNGKQKQIDLCQNCYK...IKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNFRPSSN..TP.	76
NTDB id 241 SP RS04015 WP 000882523.1	HLYTNLNGKQKQIDLCQNCYK...IKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNFRPSSN..TP.	76
NTDB id 85 BSU 00860 NP 387967.1	QTIHYTPRAKKVIELSMDEARKLGHSYVGTETILLGLIREGEGVAARVLNNLGVSLNKAQQVLQL.....LGSNET....	147
NTDB id 610 V4T04 RS10165 WP 012897346.1	STLRFSPRAEEVMTAASFLAIHNNSEAVGTEHLLYALLQVEDGFGLQLLKL.....QKINIVSLRKELEKRTGLKVPESKK	153
NTDB id 290 KZH43 RS10025 WP 001109677.1	TELPFSRRLQILFDEAEYVASVVHAKVLGTEHVLVYAILHDGNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA	160
NTDB id 289 SPD RS10700 WP 001109677.1	TELPFSRRLQILFDEAEYVASVVHAKVLGTEHVLVYAILHDGNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA	160
NTDB id 287 SP RS11210 WP 001109712.1	TELPFSRRLQVLFDEAEYVASVVHAKVLGTEHVLVYAILHDSNALATRILERAGFSYEDKKDQVKIAALRRNLEERAGWTREDLKA	160
NTDB id 377 SMU RS09275 WP 002262344.1	MLLEQSHALKRTLAEEAAISQVTHAKEVGTETVLFAMLLNPNLLATRILELVGFHAKDDGESIRLLDLRKVIERYACFSKEDIKA	164
NTDB id 297 STER RS00545 WP 011680614.1	DLRAQSPALEAMLQEAQEIASVTGAVEVGEHVLMAFLLHKDLMVCRLLEVAGFQYKDDSDKPRIIDLRRSLERNAGLSKQDLKA	166
NTDB id 329 STU RS10020 WP 011225298.1	DLRAQSPALEAMLQEAQGIASVTGAVEVGEHVLMAFLLHKDLMVCRLLEVAGFQYKDDSDKPRIIDLRRSLERNAGLSKQDLKA	166
consensus	* * * * *	

```

NTDB id 84079 JG741 RS05730 WP 011675568.1
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 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

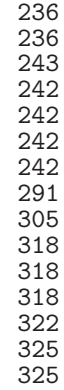
```



```

NTDB id 84079 JG741 RS05730 WP 011675568.1
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 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

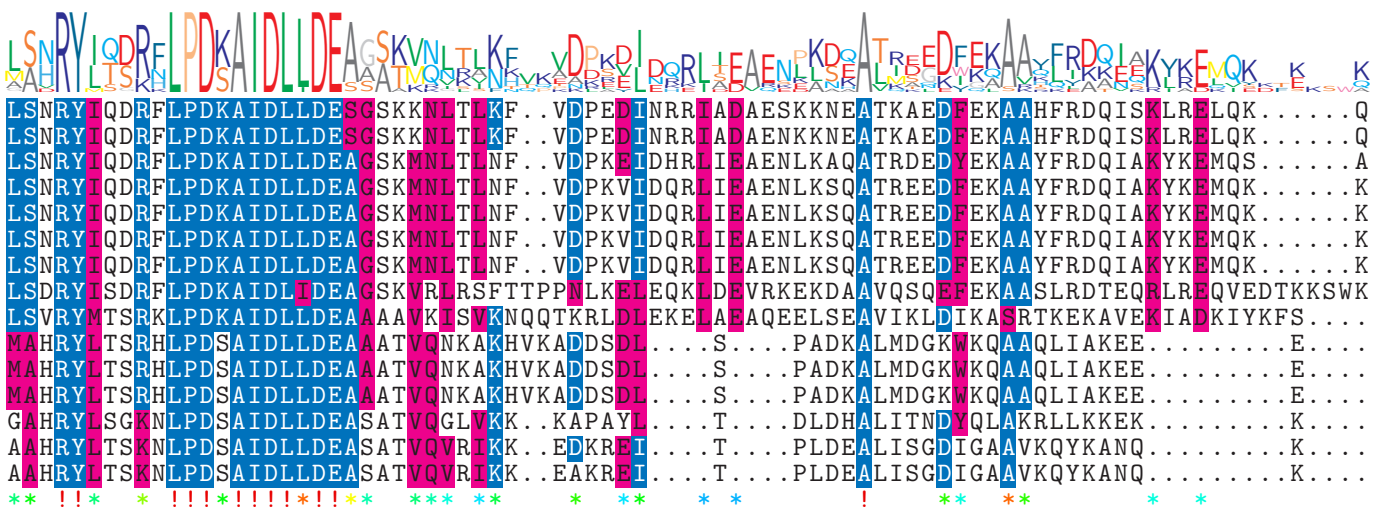
NTDB id 84079 JG741 RS05730 WP 011675568.1
NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 281 KZH43 RS03550 WP 000882517.1
NTDB id 245 SPD RS03860 WP 000882517.1
NTDB id 243 SPR RS03635 WP 000882517.1
NTDB id 241 SP RS04015 WP 000882523.1
NTDB id 85 BSU 00860 NP 387967.1
NTDB id 610 V4T04 RS10165 WP 012897346.1
NTDB id 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



320
320
327
326
326
326
326
326
376
390
403
403
403
407
410
410

logo

NTDB id 84079 JG741 RS05730 WP 011675568.1
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 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



397
397
404
403
403
403
403
403
461
471
467
467
467
469
472
472

logo

NTDB	id	84079	JG741	RS05730	WP	011675568.1	E	V	T	D	E	M	P	V	I	T	E	K	D	I	E	Q	I	V	E	Q	K	T	Q	I	P	V	G	D	L	K	E	K	E	Q	T	L	I	N	L	A	D	D	L	K	A	H	V	I	G	Q	D	E	A	V	D	K	I	S	K	A	I	R	R	S	R	V	G	L	G	K	P	N	R	P	I	G	S	F	L	F	V	G	P		482		
NTDB	id	601	KW2	RS02615	WP	021036805.1	E	V	T	D	E	M	P	V	I	T	E	K	D	I	E	Q	I	V	E	Q	K	T	Q	I	P	V	G	D	L	K	E	K	E	Q	T	L	I	N	L	A	D	D	L	K	A	H	V	I	G	Q	D	E	A	V	D	K	I	S	K	A	I	R	R	S	R	V	G	L	G	K	P	N	R	P	I	G	S	F	L	F	V	G	P		482		
NTDB	id	378	SMU	RS02690	WP	002263569.1	K	I	D	K	E	N	T	P	V	I	T	E	K	N	I	E	V	I	V	E	Q	K	T	N	I	P	V	G	E	L	K	E	K	E	Q	S	Q	L	I	H	L	A	D	D	L	K	T	R	V	I	G	Q	D	A	V	D	K	I	A	K	A	I	R	R	N	R	V	G	L	G	T	P	N	R	P	I	G	S	F	L	F	V	G	P		489	
NTDB	id	281	KZH43	RS03550	WP	000882517.1	K	I	T	D	Q	D	T	P	I	I	S	E	K	T	I	E	H	I	I	E	Q	K	T	N	I	P	V	G	D	L	K	E	K	E	Q	S	Q	L	I	H	L	A	E	D	L	K	S	H	V	I	G	Q	D	D	A	V	D	K	I	A	K	A	I	R	R	N	R	V	G	L	G	T	P	N	R	P	I	G	S	F	L	F	V	G	P		488
NTDB	id	245	SPD	RS03860	WP	000882517.1	K	I	T	D	Q	D	T	P	I	I	S	E	K	T	I	E	H	I	I	E	Q	K	T	N	I	P	V	G	D	L	K	E	K	E	Q	S	Q	L	I	H	L	A	E	D	L	K	S	H	V	I	G	Q	D	D	A	V	D	K	I	A	K	A	I	R	R	N	R	V	G	L	G	T	P	N	R	P	I	G	S	F	L	F	V	G	P		488
NTDB	id	243	SPR	RS03635	WP	000882517.1	K	I	T	D	Q	D	T	P	I	I	S	E	K	T	I	E	H	I	I	E	Q	K	T	N	I	P	V	G	D	L	K	E	K	E	Q	S	Q	L	I	H	L	A	E	D	L	K	S	H	V	I	G	Q	D	D	A	V	D	K	I	A	K	A	I	R	R	N	R	V	G	L	G	T	P	N	R	P	I	G	S	F	L	F	V	G	P		488
NTDB	id	241	SP	RS04015	WP	000882523.1	K	I	T	D	Q	D	T	P	S	I	S	E	K	T	I	E	H	I	I	E	Q	K	T	N	I	P	V	G	D	L	K	E	K	E	Q	S	Q	L	I	H	L	A	E	D	L	K	S	H	V	I	G	Q	D	D	A	V	D	K	I	A	K	A	I	R	R	N	R	V	G	L	G	T	P	N	R	P	I	G	S	F	L	F	V	G	P		488
NTDB	id	85	BSU	O0860	NP	387967.1	E	K	Q	Q	G	E	N	S	E	V	T	V	D	D	I	A	M	V	V	S	S	W	T	G	V	P	V	S	K	I	A	Q	T	E	T	D	K	L	L	N	M	E	N	I	L	H	S	R	V	I	G	Q	D	E	A	V	V	A	V	A	K	A	V	R	R	A	R	A	G	L	K	D	P	K	R	P	I	G	S	F	I	F	L	G	P		546
NTDB	id	610	V4T04	RS10165																																																																																									

logo

NTDB id	84079 JG741 RS05730 WP 011675568.1	TGVGKTELAKQLAKEIFLFGSSSESMIRFDMSEYMEKHSAVAKLI	GAPPGYVGYYEAGQLTERVRNPYS	LILLDEIEKAHPDVMHMF	567	
NTDB id	601 KW2 RS02615 WP 021036805.1	TGVGKTELAKQLAKEIFLFGSSSESMIRFDMSEYMEKHSAVAKLI	GAPPGYVGYYEAGQLTERVRNPYS	LILLDEIEKAHPDVMHMF	567	
NTDB id	378 SMU RS02690 WP 002263569.1	TGVGKTLSKKQLAIELFLFGSSED	SMIRFDMSEYMEKHAVAKLV	GAPPGYVGYYEAGQLTEKVRNPYS	LILLDEVEKAHPDVMHMF	574
NTDB id	281 KZH43 RS03550 WP 000882517.1	TGVGKTLSKKQLAIELFLFGSADS	MIRFDMSEYMEKHSAVAKLV	GAPPGYVGYYEAGQLTEKVRNPNYS	LILLDEVEKAHPDVMHMF	573
NTDB id	245 SPD RS03860 WP 000882517.1	TGVGKTLSKKQLAIELFLFGSADSMIRFDMSEYMEKHSAVAKLV	GAPPGYVGYYEAGQLTEKVRHNPNYS	LILLDEVEKAHPDVMHMF	573	
NTDB id	243 SPR RS03635 WP 000882517.1	TGVGKTLSKKQLAIELFLFGSADSMIRFDMSEYMEKHSAVAKLV	GAPPGYVGYYEAGQLTEKVRHNPNYS	LILLDEVEKAHPDVMHMF	573	
NTDB id	241 SP RS04015 WP 000882523.1	TGVGKTLSKKQLAIELFLFGSADSMIRFDMSEYMEKHSAVAKLV	GAPPGYVGYYEAGQLTEKVRHNPNYS	LILLDEVEKAHPDVMHMF	573	
NTDB id	85 BSU 00860 NP 387967.1	TGVGKTELARALAESITFGDEESMIRIDMSEYMEKHSTSRILV	CSPPGYVGYYEGQLTEKVRRKPYS	VVLLDEIEKAHPDVFNILL	631	
NTDB id	610 V4T04 RS10165 WP 012897346.1	TGVGKTELAKALADSIVFGSEDNMIRVDMSEFMEXHSTSRILI	GAPPGYVGYYEGQLTERVRNKPYS	VVLLDEVEKAHPDVFNIML	640	
NTDB id	290 KZH43 RS10025 WP 001109677.1	TGVGKTELAKALAELVLFDDESALIRFDMSEYMEKFAASRLNL	GAPPGYVGYYEGGELTEKVRNKPYS	VLLFDEVEKAHPDFNVLL	635	
NTDB id	289 SPD RS10700 WP 001109677.1	TGVGKTELAKALAEVLFDDDESALIRFDMSEYMEKFAASRLNL	GAPPGYVGYYEGGELTEKVRNKPYS	VLLFDEVEKAHPDFNVLL	635	
NTDB id	287 SP RS11210 WP 001109712.1	TGVGKTELAKALAEVLFDDDESALIRFDMSEYMEKFAASRLNL	GAPPGYVGYYEGGELTEKVRNKPYS	VLLFDEVEKAHPDFNVLL	635	
NTDB id	377 SMU RS09275 WP 002262344.1	TGVGKTELAKALAEVLFDDDESALIRFDMSEYMEKFAASRLNL	GAPPGYVGYYEGGELTEKVRNKPYS	VLLFDEVEKAHPDFNVLL	638	
NTDB id	297 STER RS00545 WP 011680614.1	TGVGKTELAKALAEVLFDDDESALLRFDMSEYMEKFAASRLNL	GAPPGYVGYYEGGELTEKVRNKPYS	VLLFDEIEKAHPDFNVLL	641	
NTDB id	329 STU RS10020 WP 011225298.1	TGVGKTELAKALAEVLFDDDESALLRFDMSEYMEKFAASRLNL	GAPPGYVGYYEGGELTEKVRNKPYS	VLLFDEIEKAHPDFNVLL	641	
consensus		* * * * * * * * * * * * * * * *				

logo

NTDB id 84079 JG741 RS05730 WP 011675568.1	ISNQTQETAETTDDEEVPAE	748
NTDB id 601 KW2 RS02615 WP 021036805.1	ISNQTQETAETTDDEEVPAE	748
NTDB id 378 SMU RS02690 WP 002263569.1	VIKASNK.VETVTKATSD.	753
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 241 SP RS04015 WP 000882523.1	QIKSAKK.AEVKSSEKEK.	752
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