

logo

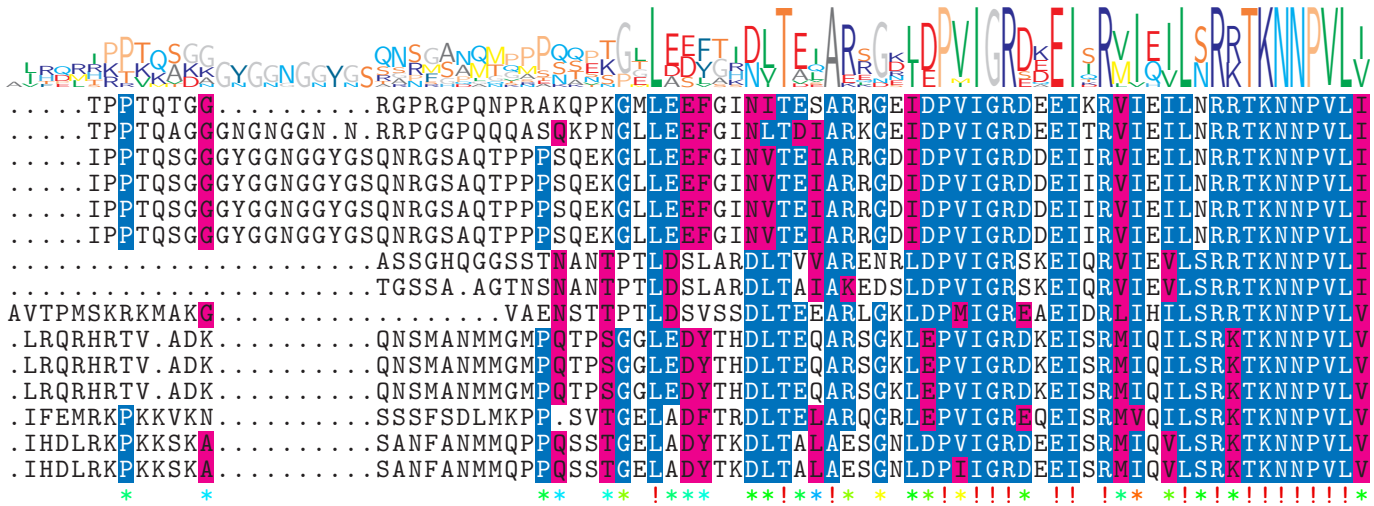
NTDB id 601 KW2 RS02615 WP 021036805.1	MTCQNCNINEA.....	TI	13
NTDB id 378 SMU RS02690 WP 002263569.1	MTCQNCNINEA.....	TI	13
NTDB id 241 SP RS04015 WP 000882523.1	MTCQNCNINDS.....	TI	13
NTDB id 281 KZH43 RS03550 WP 000882517.1	MTCQNCNINDS.....	TI	13
NTDB id 245 SPD RS03860 WP 000882517.1	MTCQNCNINDS.....	TI	13
NTDB id 243 SPR RS03635 WP 000882517.1	MTCQNCNINDS.....	TI	13
NTDB id 134207 NF53 RS00465 WP 000971184.1	..MMFGRFTERAQKVLALSQEEAIRIGHNNIGTEHILLGLVREGEGLAAKALIALGLSPEKVQKEVEALIG.....RGTEAS		75
NTDB id 85 BSU 00860 NP 387967.1	..MMFGRFTERAQKVLALAQEEALRLGHNNIGTEHILLGLVREGEGLAAKALQALGLGSEKIQKEVESLIG.....RGQEMS		75
NTDB id 610 V4T04 RS10165 WP 012897346.1	MKFENIKYPTPLDRILEKAEYEAHQYQYGTIESAHLIAAMATTSGSTAYSLLAGMNVDDSSDLLIDL.....EDLSSHVVKVR		77
NTDB id 290 KZH43 RS10025 WP 001109677.1	MNYSKALNECIESAYMVA GHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE....EVALELTETDYSQDET		75
NTDB id 289 SPD RS10700 WP 001109677.1	MNYSKALNECIESAYMVA GHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE....EVALELTETDYSQDET		75
NTDB id 287 SP RS11210 WP 001109712.1	MNYSKALNECIESAYMVA GHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE....EVALELTETDYSQDET		75
NTDB id 377 SMU RS09275 WP 002262344.1	...MTDYS LKMQEVFRLAQFEAARFESSYLESWHVLLAMVEIDSSVAGLSFAEFEADVRFEDYQAAAILAIGKKPKSSSN...DI		79
NTDB id 297 STER RS00545 WP 011680614.1	...MTIYSRKMQAIFHRAQLEAERFESPFL ETWHVLLAMVEVTGSAVYLTFTDFEDRIHSEEIETA AVLAMEKRPKDLSEDI		81
NTDB id 329 STU RS10020 WP 011225298.1	...MTIYSRKMQAIFHRAQLEAERFESPFL ETWHVLLAMVEVPGSAVYLTFTDFEDRIHSEEIETA AVLAMEKRPKDLSEDI		81
consensus	*** * * * * *		

logo

NTDB	id	601	KW2	RS02615	WP	021036805.1	HLYTSVNGQKKQIDLCQNCYQI...MKS	GGQ	EAL	FG	AGNAS	NGNSDE		PFNP	FND	I	FSA	L	GG	DFNGAASNQ	81
NTDB	id	378	SMU	RS02690	WP	002263569.1	HLYANVNGQKKQIDLCQNCYQI...MKTDP	P	ENG	PLNH	ISQQN	SSS		INPFFD	D	FFGD	LNN	FRAFNN	QDLPN	80	
NTDB	id	241	SP	RS04015	WP	000882523.1	HLYTNLNGKQKKQIDLCQNCYKI...IKTDP	N	NSL	FKGM	TDLN	NRD		FDP	FGD	FFND	LNN	FRPSS	N..TPP	77	
NTDB	id	281	KZH43	RS03550	WP	000882517.1	HLYTNLNGKQKKQIDLCQNCYKI...IKTDP	N	NSL	FKGM	TDLN	NRD		FDP	FGD	FFND	LNN	FRPSS	N..TPP	77	
NTDB	id	245	SPD	RS03860	WP	000882517.1	HLYTNLNGKQKKQIDLCQNCYKI...IKTDP	N	NSL	FKGM	TDLN	NRD		FDP	FGD	FFND	LNN	FRPSS	N..TPP	77	
NTDB	id	243	SPR	RS03635	WP	000882517.1	HLYTNLNGKQKKQIDLCQNCYKI...IKTDP	N	NSL	FKGM	TDLN	NRD		FDP	FGD	FFND	LNN	FRPSS	N..TPP	77	
NTDB	id	134207	NF53	RS00465	WP	000971184.1	QTVHYTPRAKKVIELSMDEARKLGHSYV	GTEH	ILL	LGL	IRE	GEGVAARV	LNNLGVSLNKARQQVLQ..	LLGSNE						146	
NTDB	id	85	BSU	00860	NP	387967.1	QTIHYTPRAKKVIELSMDEARKLGHSYV	GTEH	ILL	LGL	IRE	GEGVAARV	LNNLGVSLNKARQQVLQ..	LLGSNE						146	
NTDB	id	610	V4T04	RS10165	WP	012897346.1	STLRFSPRAEEVMTAASFLAIHNNSEAV	GTEH	LYA	LLQ	VED	GFGLQL	KL.....	QKINIVS	L	RKE	L	EKRTGL	KVPESK	153	
NTDB	id	290	KZH43	RS10025	WP	001109677.1	TELPFSRRLQILFDEAEYVASVHAKVLT	GTEH	VLYA	ILHD	GNALATRI	LERAGFSYEDKKDQVKIAA	LRN	LE	ERAGW	TREDLKA				160	
NTDB	id	289	SPD	RS10700	WP	001109677.1	TELPFSRRLQILFDEAEYVASVHAKVLT	GTEH	VLYA	ILHD	GNALATRI	LERAGFSYEDKKDQVKIAA	LRN	LE	ERAGW	TREDLKA				160	
NTDB	id	287	SP	RS11210	WP	001109712.1	TELPFSRRLQVLFDEAEYVASVHAKVLT	GTEH	VLYA	ILHD	SNALATRI	LERAGFSYEDKKDQVKIAA	LRN	LE	ERAGW	TREDLKA				160	
NTDB	id	377	SMU	RS09275	WP	002262344.1	MILEQSHALKRTLAEEAAISQVTHAKEV	GTEH	VLF	AMLL	NPNLLATRI	LELVGFHAKDDGESIRLL	DL	RKV	I	ERYAGF	SKEDIKA			164	
NTDB	id	329	STER	RS00545	WP	011680614.1	DLRAQSPALEAMLQEAQEIASVTGAVEV	GSEH	VLM	AFLL	LHKD	LMVCRLE	LEVAGFQYKDDSDKPRII	DL	R	RS	L	ERNAGL	SKQDLKA	166	
NTDB	id	297	STU	RS10020	WP	011225298.1	DLRAQSPALEAMLQEAQGIASVTGAVEV	GSEH	VLM	AFLL	LHKD	LMVCRLE	LEVAGFQYKDDSDKPRII	DL	R	RS	L	ERNAGL	SKQDLKA	166	
consensus							*	*	*	*	*	*	*****	*	*	*	*	*	*		

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 134207 NF53 RS00465 WP 000971184.1
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



151
158
157
157
157
157
208
207
220
233
233
233
237
240
240

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 134207 NF53 RS00465 WP 000971184.1
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



236
243
242
242
242
242
292
291
305
318
318
318
322
325
325

logo

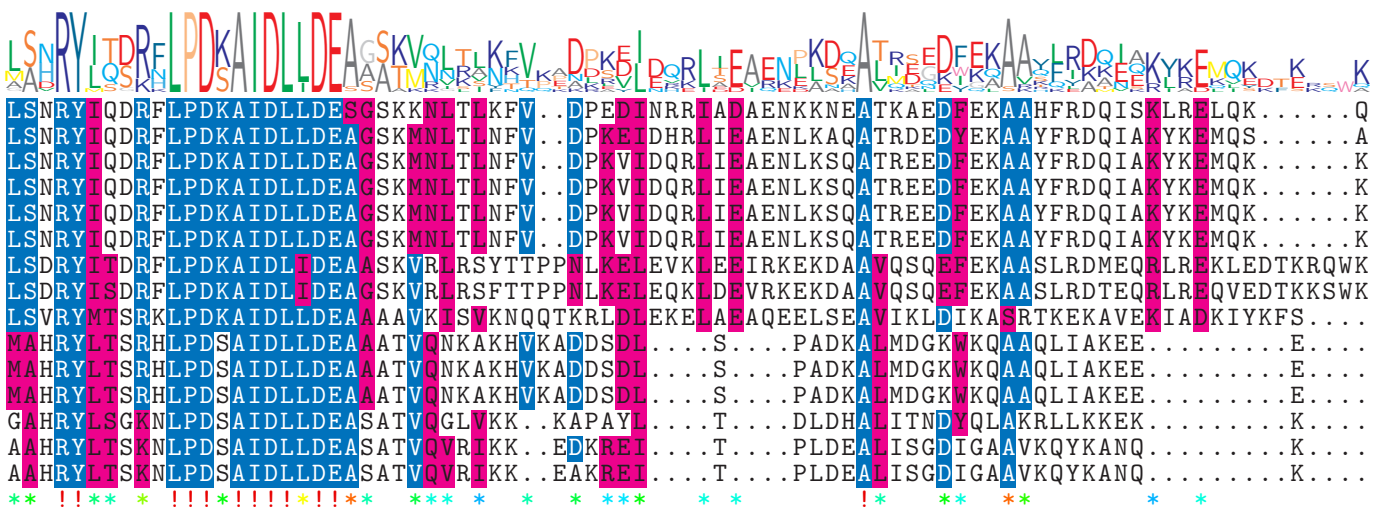
NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 241 SP RS04015 WP 000882523.1
NTDB id 281 KZH43 RS03550 WP 000882517.1
NTDB id 245 SPD RS03860 WP 000882517.1
NTDB id 243 SPR RS03635 WP 000882517.1
NTDB id 134207 NF53 RS00465 WP 000971184.1
NTDB id 85 BSU 00860 NP 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
327
326
326
326
326
326
377
376
390
403
403
403
407
410
410

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 134207 NF53 RS00465 WP 000971184.1
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

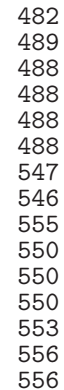


397
404
403
403
403
403
462
461
471
467
467
467
469
472
472

```

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 134207 NF53 RS00465 WP 000971184.1
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

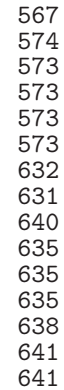
```



```

NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 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 134207 NF53 RS00465 WP 000971184.1
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	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 134207 NF53 RS00465 WP 000971184.1	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