

logo

NTDB id 183212 LLUC063 RS02915 WP 003130823.1	MLCQNCNINEA.....	11
NTDB id 601 KW2 RS02615 WP 021036805.1	MLCQNCNINEA.....	11
NTDB id 378 SMU RS02690 WP 002263569.1	MLCQNCNINEA.....	11
NTDB id 281 KZH43 RS03550 WP 000882517.1	MLCQNCNINDS.....	11
NTDB id 245 SPD RS03860 WP 000882517.1	MLCQNCNINDS.....	11
NTDB id 243 SPR RS03635 WP 000882517.1	MLCQNCNINDS.....	11
NTDB id 241 SP RS04015 WP 000882523.1	MLCQNCNINDS.....	11
NTDB id 85 BSU 00860 NP 387967.1	..MMFGRFTEAQQVLALAQEEALRLGHNNIGTEHILLGLVREGGIAAKALQALGLGSEKIQKEVESLIG.....R	70
NTDB id 610 V4T04 RS10165 WP 012897346.1	MKFENIKYTPTLDRILEKAAEYAHQYQYGTIESAHLAAMATTSGSIAYSLLAGMNVDSDDLIDL.....EDLSSH	72
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	...MTDYSLKMQEVFRLAQFEAARFESSYLESWHVLLAMVEIDSSVAGLSFAEFADVRFEDYQAAAILAIGKKPKSSS	76
NTDB id 297 STER RS00545 WP 011680614.1	...MTIYSRKMQAIFHRAQLEAERFESPFLTWHVLLAMVEVTGSVAYLTFTDFEDRIHSEEIETAAVLAMEKRPKDLS	76
NTDB id 329 STU RS10020 WP 011225298.1	...MTIYSRKMQAIFHRAQLEAERFESPFLTWHVLLAMVEVPGSVAYLTFTDFEDRIHSEEIETAAVLAMEKRPKDLS	76
consensus	* * *	

logo

NTDB id 183212 LLUC063 RS02915 WP 003130823.1	...TIHLYTSVNGQKKQIDLCQNCYQ...IMKSGGQEALEFGAGNASNGNSDEP.....FNP.FNDIFSALEHGQ	72
NTDB id 601 KW2 RS02615 WP 021036805.1	...TIHLYTSVNGQKKQIDLCQNCYQ...IMKSGGQEALEFGAGNASNGNSDEP.....FNP.FNDIFSALEHGQ	72
NTDB id 378 SMU RS02690 WP 002263569.1	...TIHLYANVNGQKKQIDLCQNCYQ...IMKTDPENGPLNHLISQNNSSS.....INPFFDDFFGDLNNF	70
NTDB id 281 KZH43 RS03550 WP 000882517.1	...TIHLYTNLNGKQKQIDLCQNCYK...IIKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNF	69
NTDB id 245 SPD RS03860 WP 000882517.1	...TIHLYTNLNGKQKQIDLCQNCYK...IIKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNF	69
NTDB id 243 SPR RS03635 WP 000882517.1	...TIHLYTNLNGKQKQIDLCQNCYK...IIKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNF	69
NTDB id 241 SP RS04015 WP 000882523.1	...TIHLYTNLNGKQKQIDLCQNCYK...IIKTDPNNSLFKGMTDLNNRD.....FDP.FGDDFFNDLNNF	69
NTDB id 85 BSU 00860 NP 387967.1	GQEMSQTIHYTPRAKKVIELSMDEARKLGHSYVGTETHILLGLIREGEGVAARVLNNLGVSLNKARQQVLQL.....	141
NTDB id 610 V4T04 RS10165 WP 012897346.1	VKVKRSTLRFSPRAEEVMTAASFLAIHNNSEAVGTEHLLYALLQVEDGFGQLQLKL.....QKINIVSLRKELEKR	143
NTDB id 290 KZH43 RS10025 WP 001109677.1	QDETFTTELPFSRRLQILFDEAEYVASVVHAKVLGTEHVLVYAILHDGNALATRILERAGFSYEDKKDQVKIAALRRNLEER	150
NTDB id 289 SPD RS10700 WP 001109677.1	QDETFTTELPFSRRLQILFDEAEYVASVVHAKVLGTEHVLVYAILHDGNALATRILERAGFSYEDKKDQVKIAALRRNLEER	150
NTDB id 287 SP RS11210 WP 001109712.1	QDETFTTELPFSRRLQVLFDEAEYVASVVHAKVLGTEHVLVYAILHDSNALATRILERAGFSYEDKKDQVKIAALRRNLEER	150
NTDB id 377 SMU RS09275 WP 002262344.1	N..DITMLEQSHALKRTLAEEAAISQVTHAKEVGTEHVLVYAILHDSNALATRILELVGFHAKDDGESIRLLDLRKVITYERY	154
NTDB id 297 STER RS00545 WP 011680614.1	ESDIIDLRAQSPALEAMLQEAQEIASVTGAVEVGSEHVLMAFLLHKLDMVCRLLEVAGFQYKDDSDKPRIIDLRRSLERN	156
NTDB id 329 STU RS10020 WP 011225298.1	ESDIIDLRAQSPALEAMLQEAQGIASVTGAVEVGSEHVLMAFLLHKLDMVCRLLEVAGFQYKDDSDKPRIIDLRRSLERN	156
consensus	* * * * * * * * * * * * *	

logo

NTDB id 183212 LLUC063 RS02915 WP 003130823.1	DVIMFIDEIHEIVGAGSAGDGNMDAGNILKPALARGE	295
NTDB id 601 KW2 RS02615 WP 021036805.1	DVIMFIDEIHEIVGAGSAGDGNMDAGNILKPALARGE	295
NTDB id 378 SMU RS02690 WP 002263569.1	DVILFIDEIHEIVGAGSAGDGNMDAGNILKPALARGE	302
NTDB id 281 KZH43 RS03550 WP 000882517.1	DIILFIDEIHEIVGAGSASDGNMDAGNILKPALARGE	301
NTDB id 245 SPD RS03860 WP 000882517.1	DIILFIDEIHEIVGAGSASDGNMDAGNILKPALARGE	301
NTDB id 243 SPR RS03635 WP 000882517.1	DIILFIDEIHEIVGAGSASDGNMDAGNILKPALARGE	301
NTDB id 241 SP RS04015 WP 000882523.1	DIILFIDEIHEIVGAGSASDGNMDAGNILKPALARGE	301
NTDB id 85 BSU 00860 NP 387967.1	NIILFIDELHTLIGAGG.AEGAIDASNILKPSLARGE	351
NTDB id 610 V4T04 RS10165 WP 012897346.1	DVIIFIDELHTIIGAGGCMDSVNDANILKPALARGE	365
NTDB id 290 KZH43 RS10025 WP 001109677.1	QVILFIDELHTIMGSGSGIDSTLDAANILKPALARGE	378
NTDB id 289 SPD RS10700 WP 001109677.1	QVILFIDELHTIMGSGSGIDSTLDAANILKPALARGE	378
NTDB id 287 SP RS11210 WP 001109712.1	QVILFIDELHTIMGSGSGIDSTLDAANILKPALARGE	378
NTDB id 377 SMU RS09275 WP 002262344.1	HIVLFIDELHTIMGSGSGIDSTLDAANILKPALARGE	382
NTDB id 297 STER RS00545 WP 011680614.1	KIILFIDELHTIIGSGSGIDSTLDAANILKPALARGE	385
NTDB id 329 STU RS10020 WP 011225298.1	KIILFIDELHTIIGSGSGIDSTLDAANILKPALARGE	385
consensus	***!!!!*! **!*!*** * *!***!!!!*!!!!*!!!!*!!!! * ***!*****!!	

logo

NTDB id 183212 LLUC063 RS02915 WP 003130823.1	RGIQARYEDYHHVKYTDEAIEAAHLSNRYIQDRFLPDKAIDLLDESGSKNLT	373
NTDB id 601 KW2 RS02615 WP 021036805.1	RGIQARYEDYHHVKYTDEAIEAAHLSNRYIQDRFLPDKAIDLLDESGSKNLT	373
NTDB id 378 SMU RS02690 WP 002263569.1	KGIQPKYEDYHHVKYTDEAIEAAANLSNRYIQDRFLPDKAIDLLDEAGSKMNL	380
NTDB id 281 KZH43 RS03550 WP 000882517.1	KGIQKKYEDYHHVQYTDAIEAAATLSNRYIQDRFLPDKAIDLLDEAGSKMNL	379
NTDB id 245 SPD RS03860 WP 000882517.1	KGIQKKYEDYHHVQYTDAIEAAATLSNRYIQDRFLPDKAIDLLDEAGSKMNL	379
NTDB id 243 SPR RS03635 WP 000882517.1	KGIQKKYEDYHHVQYTDAIEAAATLSNRYIQDRFLPDKAIDLLDEAGSKMNL	379
NTDB id 241 SP RS04015 WP 000882523.1	KGIQKKYEDYHHVQYTDAIEAAATLSNRYIQDRFLPDKAIDLLDEAGSKMNL	379
NTDB id 85 BSU 00860 NP 387967.1	QGLRDYEAHHRVSIITDDAIEAAVKLSDRYISDRFLPDKAIDLIDEAGSKVRL	431
NTDB id 610 V4T04 RS10165 WP 012897346.1	QGLREKFEDYHQVKFTDQAIKSAVMLSVRYMTSRKLPDKAIDLLDEAAAAVK	445
NTDB id 290 KZH43 RS10025 WP 001109677.1	QGLKATYEKHHRVQITDEAVETAVKMAHRYLTSRHLPDSAIDLLDEAAATVQ	450
NTDB id 289 SPD RS10700 WP 001109677.1	QGLKATYEKHHRVQITDEAVETAVKMAHRYLTSRHLPDSAIDLLDEAAATVQ	450
NTDB id 287 SP RS11210 WP 001109712.1	QGLKATYEKHHRVQITDEAVETAVKMAHRYLTSRHLPDSAIDLLDEAAATVQ	450
NTDB id 377 SMU RS09275 WP 002262344.1	LGLKKSYESYTHHVIIISDAAVMAAVKGAHRYLSGNLPDS	452
NTDB id 297 STER RS00545 WP 011680614.1	NGLRSSYEDYHRVTITDAAVETAVKAAHRYLTSKNLPDS	455
NTDB id 329 STU RS10020 WP 011225298.1	NGLRSSYEDYHRVTITDAAVETAVKAAHRYLTSKNLPDS	455
consensus	!* **!***! ! *! !***! ** !!* * !!!*!!!!*!!!!* *** ** * ** * *	

logo

```

NTDB id 183212 LLUC063 RS02915 WP 003130823.1
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

```



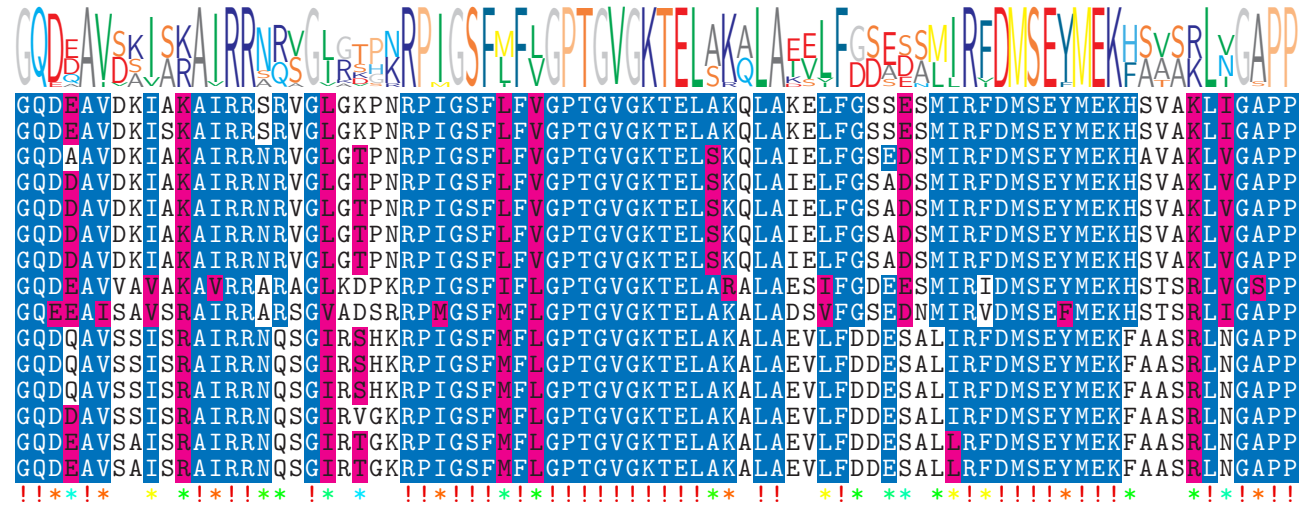
447
447
454
453
453
453
453
511
520
515
515
515
518
521
521

logo

```

NTDB id 183212 LLUC063 RS02915 WP 003130823.1
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

```



527
527
534
533
533
533
533
591
600
595
595
595
598
601
601

logo

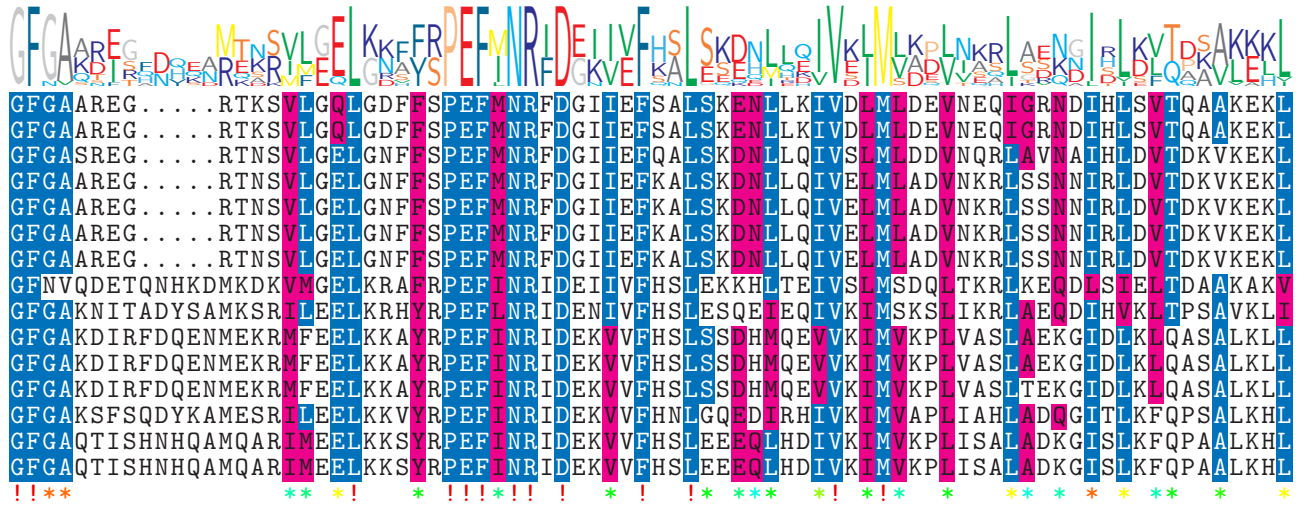
NTDB id 183212 LLUC063 RS02915 WP 003130823.1
NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 281 KZH43 RS03550 WP 000882517.1
NTDB id 245 SPD RS03860 WP 000882517.1
NTDB id 243 SPR RS03635 WP 000882517.1
NTDB id 241 SP RS04015 WP 000882523.1
NTDB id 85 BSU 00860 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



605
605
612
611
611
611
611
671
680
675
675
675
678
681
681

logo

NTDB id 183212 LLUC063 RS02915 WP 003130823.1
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



680
680
687
686
686
686
686
751
760
755
755
755
758
761
761

```

NTDB id 183212 LLUC063 RS02915 WP 003130823.1
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

```

-  non conserved
-  similar
-  $\geq 50\%$ conserved