

logo

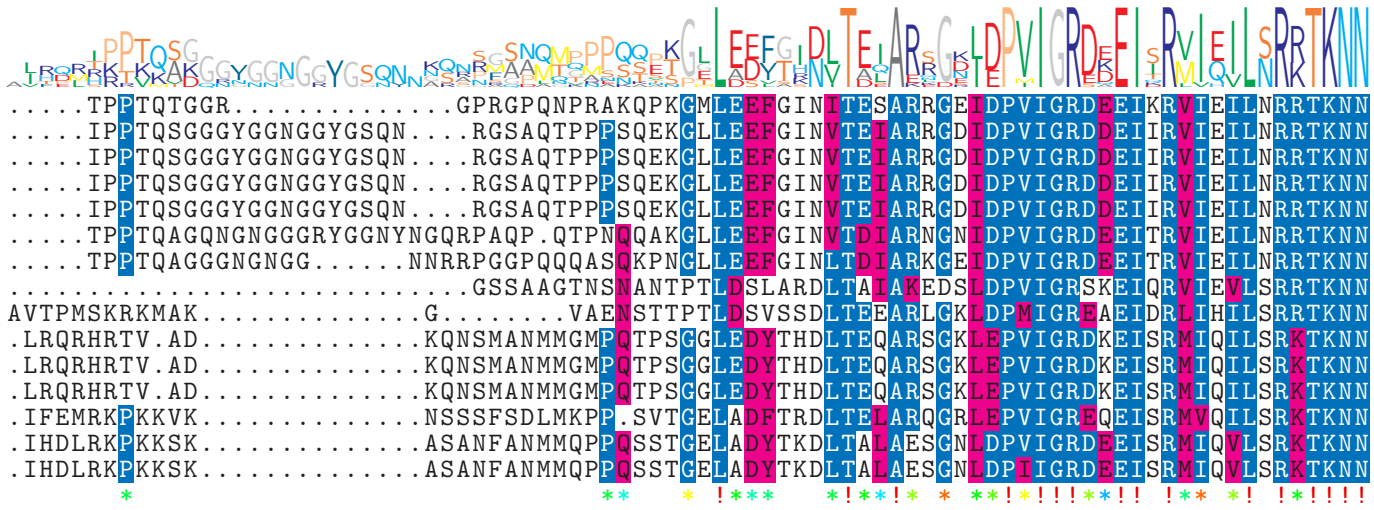
NTDB id 601 KW2 RS02615 WP 021036805.1	MLCQNCNINEAT.....I	13
NTDB id 281 KZH43 RS03550 WP 000882517.1	MLCQNCNKINDST.....I	13
NTDB id 245 SPD RS03860 WP 000882517.1	MLCQNCNKINDST.....I	13
NTDB id 243 SPR RS03635 WP 000882517.1	MLCQNCNKINDST.....I	13
NTDB id 241 SP RS04015 WP 000882523.1	MLCQNCNKINDST.....I	13
NTDB id 141991 VT08 RS05870 WP 002983882.1	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	MTIYSRKMQAIFHRAQLEAERFESPFLWTWHVLLAMVEVPGSVAYLTFTDFEDRIHSEEIETA 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 141991 VT08 RS05870 WP 002983882.1	HLYTSVNGKQKQVLDLCQNCYQI...MKSDPANSLNGLTPGYRAQ.....DRSTSPFFDDFFGD LNNFRAFNG..LPN	81
NTDB id 378 SMU RS02690 WP 002263569.1	HLYANVNGCQKQIDLCQNCYQI...MKTDPENGPLNHLSQQ...N.....SSSINPFDDFFGD LNNFRAFNNQDLPN	80
NTDB id 85 BSU 00860 NP 387967.1	QTIHYTPRAKKVIELSMDEARKLGHSYVGTEHILLGLIREGEGVAARVLNNLGVSLNKAQQVLQL.....LGSNET....	147
NTDB id 610 V4T04 RS10165 WP 012897346.1	STLRFSPRAEEVMTAASFLAIHNNSEAVGTEHLLYALLQVEDGFGLQLLKL.....QKINIVSLRKELEKRTGLKVPESKK	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	MLLEQSHALKRTLAEEAAAISSVTHAKEVGTEHVLFAMLLNPNLLATRILELVGFHAKDDGESIRLLDLRKVIERYACFSKEDIKA	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 141991 VT08 RS05870 WP 002983882.1
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 141991 VT08 RS05870 WP 002983882.1
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

logo

NTDB id 601 KW2 RS02615 WP 021036805.1	SGIDGNMDAGNILKPALARGE	316
NTDB id 281 KZH43 RS03550 WP 000882517.1	SASDGNMDAGNILKPALARGE	322
NTDB id 245 SPD RS03860 WP 000882517.1	SASDGNMDAGNILKPALARGE	322
NTDB id 243 SPR RS03635 WP 000882517.1	SASDGNMDAGNILKPALARGE	322
NTDB id 241 SP RS04015 WP 000882523.1	SASDGNMDAGNILKPALARGE	322
NTDB id 141991 VT08 RS05870 WP 002983882.1	SAGDGNMDAGNILKPALARGE	329
NTDB id 378 SMU RS02690 WP 002263569.1	SAGDGNMDAGNILKPALARGE	323
NTDB id 85 BSU 00860 NP 387967.1	G.AEGAIDASNILKPS	372
NTDB id 610 V4T04 RS10165 WP 012897346.1	GGMDSVNDAA	386
NTDB id 290 KZH43 RS10025 WP 001109677.1	SGIDSTLDAANILKPALARGT	399
NTDB id 289 SPD RS10700 WP 001109677.1	SGIDSTLDAANILKPALARGT	399
NTDB id 287 SP RS11210 WP 001109712.1	SGIDSTLDAANILKPALARGT	399
NTDB id 377 SMU RS09275 WP 002262344.1	SGIDSTLDAANILKPALARGS	403
NTDB id 297 STER RS00545 WP 011680614.1	SGIDSTLDAANILKPALARGT	406
NTDB id 329 STU RS10020 WP 011225298.1	SGIDSTLDAANILKPALARGT	406
consensus	*** * !!!!!!!*!!!!*****!!!! !! !!!!!*!!!! * ****!*****!! !* ****! ! ** !**	

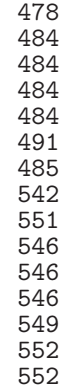
logo

NTDB id 601 KW2 RS02615 WP 021036805.1	AAVGLSNRYIQDRFLPDKAIDLLDEAGSKVNLT	396
NTDB id 281 KZH43 RS03550 WP 000882517.1	AAATLSNRYIQDRFLPDKAIDLLDEAGSKMNL	402
NTDB id 245 SPD RS03860 WP 000882517.1	AAATLSNRYIQDRFLPDKAIDLLDEAGSKMNL	402
NTDB id 243 SPR RS03635 WP 000882517.1	AAATLSNRYIQDRFLPDKAIDLLDEAGSKMNL	402
NTDB id 241 SP RS04015 WP 000882523.1	AAATLSNRYIQDRFLPDKAIDLLDEAGSKMNL	402
NTDB id 141991 VT08 RS05870 WP 002983882.1	AAAHLSNRYIQDRFLPDKAIDLLDEAGSKMNL	409
NTDB id 378 SMU RS02690 WP 002263569.1	AAANLSNRYIQDRFLPDKAIDLLDEAGSKMNL	403
NTDB id 85 BSU 00860 NP 387967.1	AAVKLSDRYISDRFLPDKAIDLLDEAGSKVRL	457
NTDB id 610 V4T04 RS10165 WP 012897346.1	SAVMLSVRYM	471
NTDB id 290 KZH43 RS10025 WP 001109677.1	TAVKMAHRYLTSRHL	467
NTDB id 289 SPD RS10700 WP 001109677.1	TAVKMAHRYLTSRHL	467
NTDB id 287 SP RS11210 WP 001109712.1	TAVKMAHRYLTSRHL	467
NTDB id 377 SMU RS09275 WP 002262344.1	AAVKG	469
NTDB id 297 STER RS00545 WP 011680614.1	TAVKAAHRYLTS	472
NTDB id 329 STU RS10020 WP 011225298.1	TAVKAAHRYLTS	472
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 141991 VT08 RS05870 WP 002983882.1
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

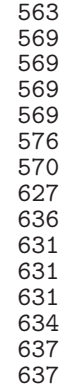
```



```

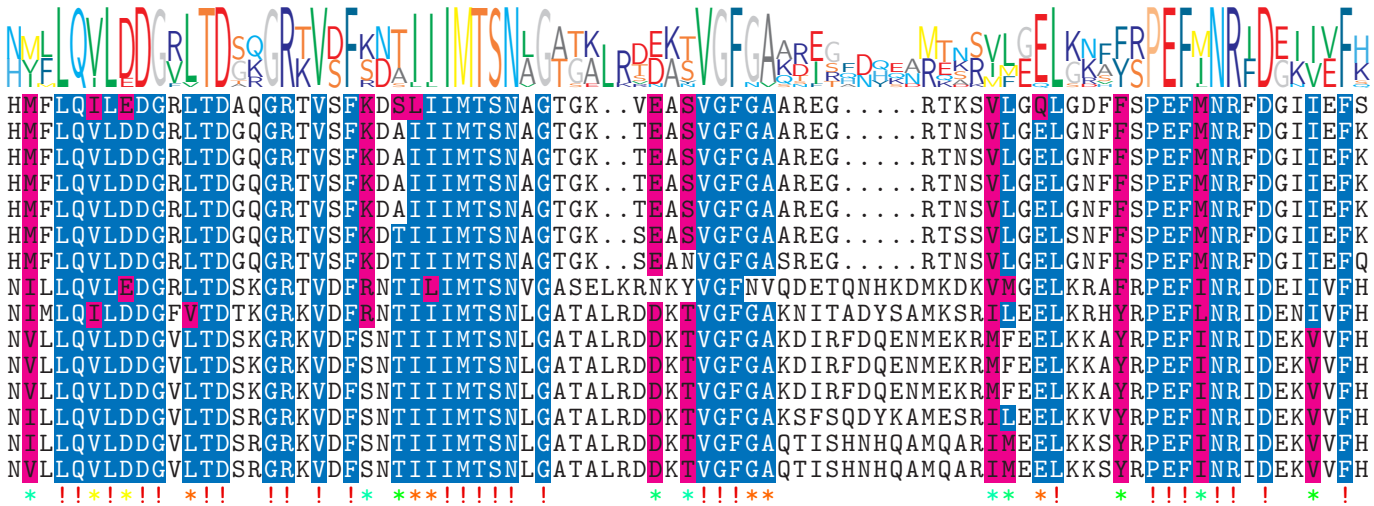
NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 281 KZH43 RS03550 WP 000882517.1
NTDB id 245 SPD RS03860 WP 000882517.1
NTDB id 243 SPR RS03635 WP 000882517.1
NTDB id 241 SP RS04015 WP 000882523.1
NTDB id 141991 VT08 RS05870 WP 002983882.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 85 BSU 00860 NP 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

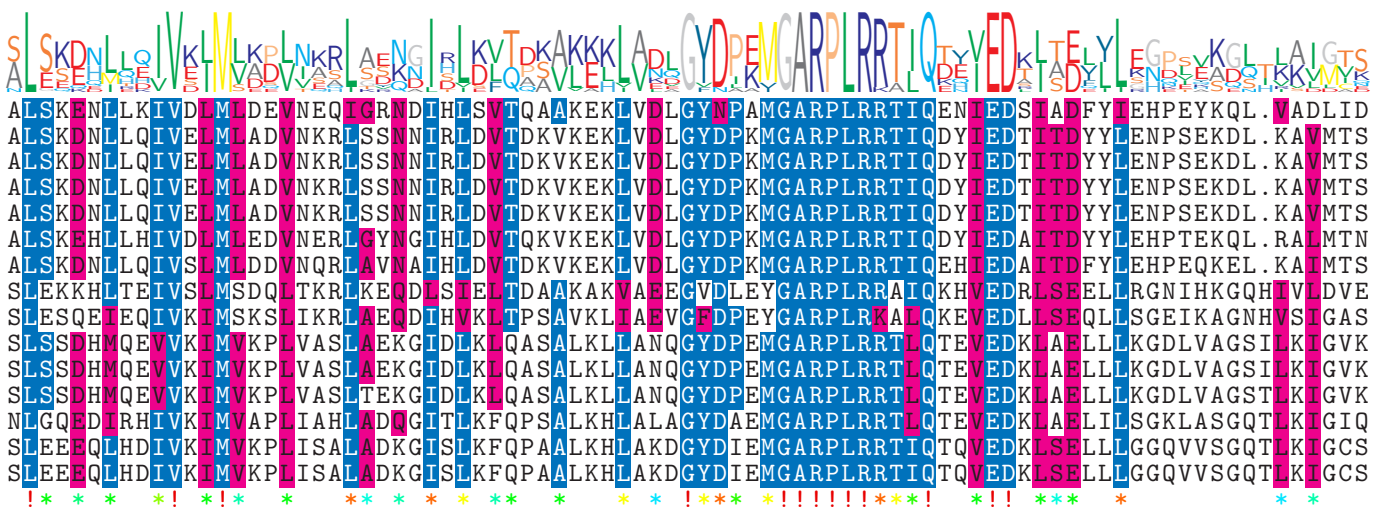
NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 281 KZH43 RS03550 WP 000882517.1
NTDB id 245 SPD RS03860 WP 000882517.1
NTDB id 243 SPR RS03635 WP 000882517.1
NTDB id 241 SP RS04015 WP 000882523.1
NTDB id 141991 VT08 RS05870 WP 002983882.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 85 BSU 00860 NP 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



641
647
647
647
647
654
648
712
721
716
716
716
719
722
722

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 141991 VT08 RS05870 WP 002983882.1
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



725
731
731
731
731
738
732
797
806
801
801
801
804
807
807

logo

NTDB id 601 KW2 RS02615 WP 021036805.1	DKI	V	I	S	N	Q	T	Q	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	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	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	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	752
NTDB id 141991 VT08 RS05870 WP 002983882.1	S	E	N	I	T	I	K	A	V	K	E	G	D	S	F	L	N	E	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	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