

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 60883 R8625 RS03740 WP 317649363.1	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 241 SP RS04015 WP 000882523.1	MTCQNCNINDS.....	TI	13
NTDB id 85 BSU 00860 NP 387967.1	..MMFGRFTERAQKVLALAQEEALRLGHNNIGTEHILLGLVREGEGLAAKALQALGLGSEKIQKEVESLIG.....RGQEMS		75
NTDB id 610 V4T04 RS10165 WP 012897346.1	MKFENIKYPTPTLDRILEKAEYAHQYQYGTIESAHLAAMATTSGSLAYSLLAGMNVDDSSDLLIDL.....EDLSSHVKVKR		77
NTDB id 290 KZH43 RS10025 WP 001109677.1	MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET	F	75
NTDB id 289 SPD RS10700 WP 001109677.1	MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET	F	75
NTDB id 287 SP RS11210 WP 001109712.1	MNYSKALNECIESAYMVAGHFGARYLESWHLLIAMSNHSYSVAGATLNDYPYEMDRLE.....EVALELTETDYSQDET	F	75
NTDB id 377 SMU RS09275 WP 002262344.1	MTDYSLKMQEVFRLAQFEAARFESSYLESWHVLLAMVEIDSSVAGLSFAEFEADVRFEDYQAAAILAIGKKPKSSSN..DI		79
NTDB id 379 STER RS00545 WP 011680614.1	MTIYSRKMQAIFHRAQLEAERFESPFLFETWHVLLAMVEVTGSAVYLTFTDFEDRIHSEEIETA AVLAMEKRPKDLSESDI	I	81
NTDB id 329 STU RS10020 WP 011225298.1	MTIYSRKMQAIFHRAQLEAERFESPFLFETWHVLLAMVEVPGSAVYLTFTDFEDRIHSEEIETA AVLAMEKRPKDLSESDI	I	81
consensus	*.....*	**	

logo

NTDB	id	601	KW2	RS02615	WP	021036805.1	H	L	Y	T	S	V	N	G	Q	K	K	Q	I	D	L	C	Q	N	C	Y	Q	...	I	M	K	S	G	G	E	A	L	F	G	A	G	N	A	S	N	G	N	S	D	E	P		F	N	P	.	F	N	D	I	F	S	A	.	L	Q	G	Q	.	D	F	N	G	A	A	S	N	.	80																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
NTDB	id	378	SMU	RS02690	WP	002263569.1	H	L	Y	A	N	V	N	G	Q	K	K	Q	I	D	L	C	Q	N	C	Y	Q	...	I	M	K	T	D	P	E	N	G	L	N	H	.	S	Q	Q	N	S	S		I	N	P	F	F	D	D	F	F	G	D	.	L	N	N	F	R	A	.	F	N	N	Q	D	L	P	.	79																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
NTDB	id	60883	R8625	RS03740	WP	317649363.1	H	L	Y	T	N	L	N	G	K	K	K	Q	I	D	L	C	Q	N	C	Y	K	...	I	I	K	T	D	P	N	N	S	L	F	K	G	M	T	D	L	N	N	R	D		F	D	P	.	F	G	D	F	F	N	D	.	L	N	N	F	R	P	S	S	N	..	T	P	.	76																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
NTDB	id	281	KZH43	RS03550	WP	000882517.1	H	L	Y	T	N	L	N	G	K	K	K	Q	I	D	L	C	Q	N	C	Y	K	...	I	I	K	T	D	P	N	N	S	L	F	K	G	M	T	D	L	N	N	R	D		F	D	P	.	F	G	D	F	F	N	D	.	L	N	N	F	R	P	S	S	N	..	T	P	.	76																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
NTDB	id	245	SPD	RS03860	WP	000882517.1	H	L	Y	T	N	L	N	G	K	K	K	Q	I	D	L	C	Q	N	C	Y	K	...	I	I	K	T	D	P	N	N	S	L	F	K	G	M	T	D	L	N	N	R	D		F	D	P	.	F	G	D	F	F	N	D	.	L	N	N	F	R	P	S	S	N	..	T	P	.	76																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
NTDB	id	243	SPR	RS03635	WP	000882517.1	H	L	Y	T	N	L	N	G	K	K	K	Q	I	D	L	C	Q	N	C	Y	K	...	I	I	K	T	D	P	N	N	S	L	F	K	G	M	T	D	L	N	N	R	D		F	D	P	.	F	G	D	F	F	N	D	.	L	N	N	F	R	P	S	S	N	..	T	P	.	76																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
NTDB	id	241	SP	RS04015	WP	000882523.1	H	L	Y	T	N	L	N	G	K	K	K	Q	I	D	L	C	Q	N	C	Y	K	...	I	I	K	T	D	P	N	N	S	L	F	K	G	M	T	D	L	N	N	R	D		F	D	P	.	F	G	D	F	F	N	D	.	L	N	N	F	R	P	S	S	N	..	T	P	.	76																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
NTDB	id	85	BSU	O0860	NP	387967.1	Q	T	I	H	Y	T	P	R	A	K	K	V	I	E	L	S	M	D	E	A	R	K	L	G	H	S	Y	V	G	T	E	H	I	L	L	G	L	I	R	E	G	E	G	V	A	A	R	V	L	N	N	L	G	V	S	L	N	K	A	R	Q	Q	V	L	Q	L		L	C	S	N	E	T		147																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
NTDB	id	610	V4T04	RS10165	WP	012897346.1	S	T	L	R	F	S	P	R	A	E	E	V	M	T	A	A	S	F	L	A	I	H	N	N	S	E	A	V	G	T	E	H	L	L	Y	A	L	L	Q	V	E	D	.	G	F	G	L	Q	L	L	K	L		Q	K	I	N	I	V	S	L	R	K	E	.	L	E	K	R	T	.	G	L	K	V	P	E	S	K	.	153																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
NTDB	id	290	KZH43	RS10025	WP	001109677.1	T	E	L	P	F	S	R	R	L	Q	I	L	F	D	E	A	E	Y	V	A	S	V	V	H	A	K	V	L	G	T	E	H	V	L	Y	A	I	L	H	D	.	S	N	A	L	A	T	R	I	L	E	R	A	G	F	S	Y	E	D	K	K	D	Q	V	K	I	A	A	L	R	R	N	.	L	E	E	R	A	G	W	T	R	E	D	L	K	A	.	160																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
NTDB	id	289	SPD	RS10700	WP	001109677.1	T	E	L	P	F	S	R	R	L	Q	I	L	F	D	E	A	E	Y	V	A	S	V	V	H	A	K	V	L	G	T	E	H	V	L	Y	A	I	L	H	D	.	S	N	A	L	A	T	R	I	L	E	R	A	G	F	S	Y	E	D	K	K	D	Q	V	K	I	A	A	L	R	R	N	.	L	E	E	R	A	G	W	T	R	E	D	L	K	A	.	160																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
NTDB	id	287	SP	RS11210	WP	001109712.1	T	E	L	P	F	S	R	R	L	Q	I	L	F	D	E	A	E	Y	V	A	S	V	V	H	A	K	V	L	G	T	E	H	V	L	Y	A	I	L	H	D	.	S	N	A	L	A	T	R	I	L	E	R	A	G	F	S	Y	E	D	K	K	D	Q	V	K	I	A	A	L	R	R	N	.	L	E	E	R	A	G	W	T	R	E	D	L	K	A	.	160																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
NTDB	id	377	SMU	RS09275	WP	002262344.1	M	L	L	E	Q	S	H	A	L	K	R	T	L	A	E	A	A	A	I	S	Q	V	T	H	A	K	E	V	G	T	E	H	V	L	E	A	M	L	L	N	P	.	M	L	A	T	R	I	L	E	L	V	G	F	H	A	K	D	D	G	E	S	I	R	L	D	.	L	R	K	V	.	T	E	R	Y	A	C	F	S	K	E	D	I	K	A	.	164																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
NTDB	id	329	STER	RS00545	WP	011680614.1	D	L	R	A	Q	S	P	A	L	E	A	M	L	Q	E	A	Q	.	E	I	A	S	V	T	G	A	V	E	V	G	S	E	H	V	L	M	A	F	L	L	H	K	D	.	L	M	V	C	R	L	L	E	V	A	G	F	Q	Y	K	D	D	S	D	K	.	P	R	I	D	.	L	R	R	S	.	L	E	R	N	A	G	L	S	K	Q	D	L	K	A	.	166																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
NTDB	id	327	STU	RS10020	WP	011225298.1	D	L	R	A	Q	S	P	A	L	E	A	M	L	Q	E	A	Q	.	E	I	A	S	V	T	G	A	V	E	V	G	S	E	H	V	L	M	A	F	L	L	H	K	D	.	L	M	V	C	R	L	L	E	V	A	G	F	Q	Y	K	D	D	S	D	K	.	P	R	I	D	.	L	R	R	S	.	L	E	R	N	A	G	L	S	K	Q	D	L	K	A	.	166																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
consensus							*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

logo

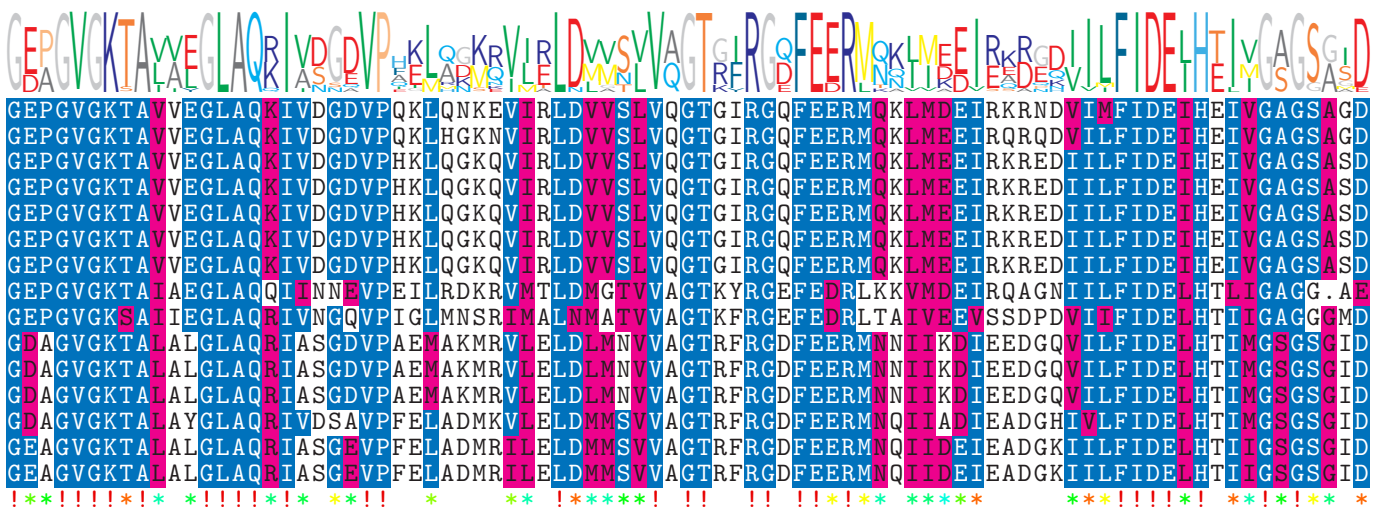
NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 60883 R8625 RS03740 WP 317649363.1
NTDB id 281 KZH43 RS03550 WP 000882517.1
NTDB id 245 SPD RS03860 WP 000882517.1
NTDB id 243 SPR RS03635 WP 000882517.1
NTDB id 241 SP RS04015 WP 000882523.1
NTDB id 85 BSU 00860 NP 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



151
158
157
157
157
157
157
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 60883 R8625 RS03740 WP 317649363.1
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



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

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	Q	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	L	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	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	60883	R8625	RS03740	WP	317649363.1	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	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	00860	NP	387967.1	E	K	Q	G	Q	E	N	S	E	V	T	V	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	N	M	E	N	I	L	H	S	R	V	I	G	Q	D	E	A	V	V	A	K	A	V	R	R	A	R	A	C	L	K	D	P	K	R	P	I	G	S	F	I	F	L	G	P		546				
NTDB	id	610	V4T04	RS10165																																																																																									

[illegible]

```

NTDB id 601 KW2 RS02615 WP 021036805.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 60883 R8625 RS03740 WP 317649363.1
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 601 KW2 RS02615 WP 021036805.1
NTDB id 378 SMU RS02690 WP 002263569.1
NTDB id 60883 R8625 RS03740 WP 317649363.1
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 601 KW2 RS02615 WP 021036805.1	VISNQTQETAETTDDEEVP	AE	748
NTDB id 378 SMU RS02690 WP 002263569.1	VIKASNKVETVTKATSD		753
NTDB id 60883 R8625 RS03740 WP 317649363.1	QIKSAKKA	EVKTSEKEV	752
NTDB id 281 KZH43 RS03550 WP 000882517.1	QIKSAKKA	EVKSSEKEK	752
NTDB id 245 SPD RS03860 WP 000882517.1	QIKSAKKA	EVKSSEKEK	752
NTDB id 243 SPR RS03635 WP 000882517.1	QIKSAKKA	EVKSSEKEK	752
NTDB id 241 SP RS04015 WP 000882523.1	QIKSAKKA	EVKSSEKEK	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