

NTDB	id	1250	GC085	RS13065	WP	027219989.1	..MNNLQLPLLA	LNRMKRIG....PRTVLKLQKRPDLNLMFQLSSV	DLEEAGLP	SWLAQTIKNFDPDFIKTDLNLWLSSS	73		
NTDB	id	599	KW2	RS05940	WP	021037268.1	.MITNFD....	LFRWKKA	GMTNLGVNKLLKFRRKYDRKISLRQM..	GQVAQVK	SIPNFIEQYKNQDVKKLRADYKKFS..	71	
NTDB	id	525	SMSK321	RS06295	WP	000705298.1	MKITNYE....	IYKLKKSGLTNQQILKVLEYGENVDQELLGDI..	ADISGCRNP	AVFMERYFQIDDAHLEKEFKKIP..	72		
NTDB	id	267	KZH43	RS05590	WP	000705306.1	MKITNYE....	IYKLKKSGLTNQQILKVLEYGENVDQELLGDI..	ADISGCRNP	AVFMERYFQIDDAHLSEKFFQKFP..	72		
NTDB	id	226	SPD	RS05990	WP	000705306.1	MKITNYE....	IYKLKKSGLTNQQILKVLEYGENVDQELLGDI..	ADISGCRNP	AVFMERYFQIDDAHLSKEFFQKFP..	72		
NTDB	id	192	SPR	RS05715	WP	000705306.1	MKITNYE....	IYKLKKSGLTNQQILKVLEYGENVDQELLGDI..	ADISGCRNP	AVFMERYFQIDDAHLSKEFFQKFP..	72		
NTDB	id	157	SP	RS06205	WP	000705306.1	MKITNYE....	IYKLKKSGLTNQQILKVLEYGENVDQELLGDI..	ADISGCRNP	AVFMERYFQIDDAHLSKEFFQKFP..	72		
NTDB	id	497	SM12261	RS05565	WP	000705318.1	MKITNYE....	IYKLKKSGLTNQQVLA	VLEYGENVDQELLGDI..	A	EISGCRNP	AVFMERYFQIDDAHLEKEFFQKFP..	72
NTDB	id	342076	ETT52	RS04425	WP	136026141.1	..MNHFE....	LYKLKKA	GLTNKNILNILDYQKHQEKSLSLRDM..	AVVSGCKHP	SHFIEAYKQLDIQKLKMEFKQFP..	70	
NTDB	id	407	SMU	RS04605	WP	002262865.1	..MDNFG....	LFPLKKA	GLTNLNILNIIDYEERTQKSLSRDM..	AVVSKNK	KPLIFMEHYKNLDSKALREFNRF..	70	
consensus							*****	*****!*****	*****	*****!	*****		

NTDB id 1250 GC085 RS13065 WP 027219989.1	ENHHIL	I	W	D	S	P	Y	P	A	L	K	E	I	A	D	P	P	F	I	L	Y	A	K	G	E	L	S	A	L	T	Q	P	S	L	A	I	V	G	S	R	N	A	S	V	T	G	N	E	N	A	R	A	F	S	R	E	I	S	R	H	G	V	S	I	V	S	G	L	A	L	G	I	D				
NTDB id 599 KW2 RS05940 WP 021037268.1		S	F	S	I	L	D	D	L	Y	P	E	R	L	R	E	I	Y	N	P	P	V	L	I	F	Y	Q	G	N	I	D	L	L	K	N	P	K	L	A	F	V	G	S	R	L	A	G	Q	S	G	I	K	S	V	Q	K	I	V	T	E	L	N	Q	..	S	F	T	I	V	S	G	L	A	K	G	I	D
NTDB id 525 SMSK321 RS06295 WP 000705298.1		S	F	S	I	L	D	D	C	Y	P	W	L	S	E	I	Y	D	A	P	V	L	L	F	Y	K	G	N	L	D	L	L	K	F	P	K	V	A	V	G	S	R	S	C	S	K	Q	G	A	K	S	V	E	K	I	I	Q	G	L	E	N	..	E	L	V	I	V	S	G	L	A	K	G	I	D		
NTDB id 267 KZH43 RS05590 WP 000705306.1		S	F	S	I	L	D	D	C	Y	P	W	L	S	E	I	Y	D	A	P	V	L	L	F	Y	K	G	N	L	D	L	L	K	F	P	K	V	A	V	G	S	R	A	C	S	K	Q	G	A	K	S	V	E	K	V	I	Q	G	L	E	N	..	E	L	V	I	V	S	G	L	A	K	G	I	D		
NTDB id 226 SPD RS05990 WP 000705306.1		S	F	S	I	L	D	D	C	Y	P	W	L	S	E	I	Y	D	A	P	V	L	L	F	Y	K	G	N	L	D	L	L	K	F	P	K	V	A	V	G	S	R	A	C	S	K	Q	G	A	K	S	V	E	K	V	I	Q	G	L	E	N	..	E	L	V	I	V	S	G	L	A	K	G	I	D		
NTDB id 192 SPR RS05715 WP 000705306.1		S	F	S	I	L	D	D	C	Y	P	W	L	S	E	I	Y	D	A	P	V	L	L	F	Y	K	G	N	L	D	L	L	K	F	P	K	V	A	V	G	S	R	A	C	S	K	Q	G	A	K	S	V	E	K	V	I	Q	G	L	E	N	..	E	L	V	I	V	S	G	L	A	K	G	I	D		
NTDB id 157 SP RS06205 WP 000705306.1		S	F	S	I	L	D	D	C	Y	P	W	L	S	E	I	Y	D	A	P	V	L	L	F	Y	K	G	N	L	D	L	L	K	F	P	K	V	A	V	G	S	R	A	C	S	K	Q	G	A	K	S	V	E	K	V	I	Q	G	L	E	N	..	E	L	V	I	V	S	G	L	A	K	G	I	D		
NTDB id 497 SM12261 RS05565 WP 000705318.1		S	F	S	I	L	D	D	C	Y	P	W	L	S	E	I	Y	D	A	P	V	L	L	F	Y	K	G	N	L	D	L	L	K	F	P	K	V	A	V	G	S	R	A	C	S	K	Q	G	A	K	S	V	E	K	V	I	Q	G	L	E	N	..	E	L	V	I	V	S	G	L	A	K	G	I	D		
NTDB id 342076 ETT52 RS04425 WP 136026141.1		S	I	S	I	L	D																																																																						

NTDB	id	1250	GC085	RS13065	WP	027219989.1	AH	AHL	G	C	L	E	G	G	K	T	I	A	V	L	G	T	I	D	C	I	Y	P	R	R	H	L	K	L	A	E	Q	I	T	E	N	G	L	L	S	E	F	P	L	K	S	P	I	A	G	H	F	P	L	R	N	R	I	I	S	G	L	S	L	C	I	L	V	I	E	A	A	I	K		233						
NTDB	id	599	KW2	RS05940	WP	021037268.1	T	A	S	H	L	S	A	I	K	T	K	T	P	T	I	A	V	I	G	T	G	L	D	I	F	Y	P	L	E	N	R	K	I	Q	E	Y	L	A	K	Y	Q	L	V	L	S	E	Y	S	L	G	E	K	P	L	K	Y	H	F	P	E	R	N	R	I	I	A	G	L	S	R	G	V	V	V	E	A	K	L	R		226
NTDB	id	525	SMSK321	RS06295	WP	000705298.1	T	A	A	H	M	A	A	L	Q	N	G	G	K	T	I	A	V	I	G	T	G	L	D	V	F	Y	P	K	A	N	K	R	L	Q	D	Y	I	S	N	D	H	L	V	L	S	E	Y	G	P	G	E	Q	P	L	K	F	H	F	P	A	R	N	R	I	I	A	G	L	C	R	G	V	I	A	E	A	K	M	R		227
NTDB	id	267	KZH43	RS05590	WP	000705306.1	T	A	A	H	M	A	A	L	Q	N	G	G	K	T	I	A	V	I	G	T	G	L	D	V	F	Y	P	K	A	N	K	R	L	Q	D	Y	I	G	N	D	H	L	V	L	S	E	Y	G	P	G	E	Q	P	L	K	F	H	F	P	A	R	N	R	I	I	A	G	L	C	R	G	V	I	A	E	A	K	M	R		227
NTDB	id	226	SPD	RS05990	WP	000705306.1	T	A	A	H	M	A	A	L	Q	N	G	G	K	T	I	A	V	I	G	T	G	L	D	V	F	Y	P	K	A	N	K	R	L	Q	D	Y	I	G	N	D	H	L	V	L	S	E	Y	G	P	G	E	Q	P	L	K	F	H	F	P	A	R	N	R	I	I	A	G	L	C	R	G	V	I	A	E	A	K	M	R		227
NTDB	id	192	SPR	RS05715	WP	000705306.1	T	A	A	H	M	A	A	L	Q	N	G	G	K	T	I	A	V	I	G	T	G	L	D	V	F	Y	P	K	A	N	K	R	L	Q	D	Y	I	G	N	D	H	L	V	L	S	E	Y	G	P	G	E	Q	P	L	K	F	H	F	P	A	R	N	R	I	I	A	G	L	C	R	G	V	I	A	E	A	K	M	R		227
NTDB	id	157	SP	RS06205	WP	000705306.1	T	A	A	H	M	A	A	L	Q	N	G	G	K	T	I	A	V	I	G	T	G	L	D	V	F	Y	P	K	A	N	K	R	L	Q	D	Y	I	G	N	D	H	L	V	L	S	E	Y	G	P	G	E	Q	P	L	K	F	H	F	P	A	R	N	R	I	I	A	G	L	C	R	G	V	I	A	E	A	K	M	R		227
NTDB	id	497	SM12261	RS05565	WP	000705318.1	T	A	A	H	M	A	A	L	Q	N	G	G	K	T	I	A	V	I	G	T	G	L	D	V	F	Y	P	K	A	N	K	R	L	Q	D	Y	I	G	N	D	H	L	V	L	S	E	Y	G	P	G	E	Q	P	L	K	F	H	F	P	A	R	N	R	I	I	A	G	L	C	R	G	V	I	A	E	A	K	M	R		227
NTDB	id	342076	ETT52	RS04425	WP	136026141.1	T	S	A	H	L	A	C	L	K	N	G	G	Q	T	I	A	T	I	G	T	G	L	D	R	F	Y	P	K	E	N	R	E	L	Q	T	F	L	G	K	N																																									

```

NTDB id 1250 GC085 RS13065 WP 027219989.1
NTDB id 599 KW2 RS05940 WP 021037268.1
NTDB id 525 SMSK321 RS06295 WP 000705298.1
NTDB id 267 KZH43 RS05590 WP 000705306.1
NTDB id 226 SPD RS05990 WP 000705306.1
NTDB id 192 SPR RS05715 WP 000705306.1
NTDB id 157 SP RS06205 WP 000705306.1
NTDB id 497 SM12261 RS05565 WP 000705318.1
NTDB id 342076 ETT52 RS04425 WP 136026141.1
NTDB id 407 SMU RS04605 WP 002262865.1
consensus

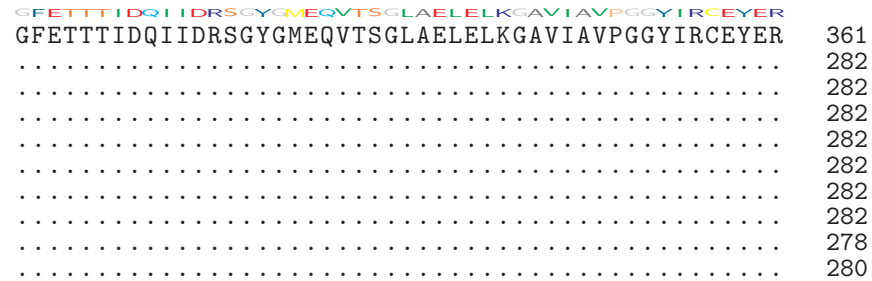
```



```

NTDB id 1250 GC085 RS13065 WP 027219989.1
NTDB id 599 KW2 RS05940 WP 021037268.1
NTDB id 525 SMSK321 RS06295 WP 000705298.1
NTDB id 267 KZH43 RS05590 WP 000705306.1
NTDB id 226 SPD RS05990 WP 000705306.1
NTDB id 192 SPR RS05715 WP 000705306.1
NTDB id 157 SP RS06205 WP 000705306.1
NTDB id 497 SM12261 RS05565 WP 000705318.1
NTDB id 342076 ETT52 RS04425 WP 136026141.1
NTDB id 407 SMU RS04605 WP 002262865.1
consensus

```



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