

NTDB id 617	LCA RS06480 WP 011375001.1	.MST	E	E	K	L	T	T	L	L	K	H	C	A	K	Q	R	V	Q	D	L	Y	F	T	P	T	I	G	G	W	R	L	T	E	R	R	Q	S	D	L	V	T	N	Q	E	L	D	K	P	T	G	T	R	Y	L	N	R	L	K	Y	M	A	G	M	D	I	S	E	T	R	R	A	Q	T	G	R	S	E	L	Q	L	A	D	84	
NTDB id 586	KW2 RS10855 WP 011836048.1	..	M	V	Q	K	K	A	Q	E	L	I	Q	K	A	I	E	M	A	S	D	I	Y	L	T	A	S	G	N	L	Y	K	I	Y	I	R	Q	L	G	R	T	L	I	E	E	V	N	Q	E	I	G	L	A	L	L	T	H	F	K	F	L	A	G	M	N	T	G	E	R	R	V	Q	L	C	A	C	W	Y	E	L	E	G	83		
NTDB id 23426	M6 RS00890 WP 002986557.1	..	M	V	Q	V	L	A	K	A	I	L	A	K	A	E	Q	V	A	Q	D	I	Y	L	P	R	A	D	Q	Y	D	L	F	L	R	I	G	D	E	R	L	V	D	V	Q	S	D	R	M	A	P	L	I	S	H	F	K	F	V	A	G	M	N	T	V	G	E	K	R	S	Q	L	G	S	C	D	Y	K	L	S	85				
NTDB id 584	DLJ51 RS00890 WP 019777327.1	MVE	V	Q	E	L	K	E	L	I	R	Q	A	V	E	Q	A	Q	D	I	Y	L	P	K	P	A	V	Y	K	I	Y	L	R	F	G	E	K	R	H	L	I	Q	T	C	P	P	E	Q	A	A	G	L	I	S	H	F	K	F	L	A	G	M	N	V	G	E	K	R	R	A	Q	L	G	C	D	Y	A	D	83						
NTDB id 385	SMU RS09035 WP 002263435.1	..	M	V	Q	K	L	G	R	K	I	I	A	E	A	V	Q	N	K	A	Q	D	I	Y	I	P	K	K	E	S	Y	E	L	Y	M	R	I	G	N	E	R	R	F	I	D	V	Y	D	H	H	F	M	A	N	L	I	S	H	F	K	F	V	A	G	M	N	V	G	E	K	R	R	S	Q	L	G	S	C	D	Y	S	Y	D	E	83
NTDB id 394	FSA28 RS09405 WP 002291652.1	..	M	V	Q	K	L	G	R	K	I	I	A	E	A	V	Q	N	K	A	Q	D	I	Y	I	P	K	K	E	S	Y	E	L	Y	M	R	I	G	N	E	R	R	F	I	D	V	Y	D	H	H	F	M	A	N	L	I	S	H	F	K	F	V	A	G	M	N	V	G	E	K	R	R	S	Q	L	G	S	C	D	Y	S	Y	D	E	83
NTDB id 429	SGO RS09420 WP 012130942.1	..	M	V	Q	K	I	A	Q	I	V	R	Q	A	K	E	E	C	A	Q	D	I	Y	F	V	P	K	D	D	C	E	L	Y	M	R	I	G	D	E	R	R	F	I	Q	T	Y	D	F	Q	L	A	A	V	I	S	H	F	K	F	L	A	G	M	N	V	G	E	K	R	R	S	Q	L	G	S	C	D	Y	R	Y	D	83			
NTDB id 500	SM12261 RS00945 WP 000249545.1	..	M	V	Q	E	I	A	Q	E	I	I	R	S	A	R	K	K	G	A	Q	D	I	Y	F	V	P	K	L	D	A																																																						

NTDB id 617	LCA RS06480 WP 011375001.1	.QTIY	LRL	ATV	GDF	FLNR	ESL	VIR	FI	YPI	GA	IYH	CH	CD	Q	QIL	LA	Q	LT	Q	MS	R	Q	S	G	L	I	F	A	G	P	T	G	S	G	K	T	S	L	Y	H	A	Q	S	M	S	A	K	M	V	V	A	I	E	D	168																					
NTDB id 586	KW2 RS10855 WP 011836048.1	SSAKR	LRL	ST	V	G	D	F	E	G	N	ESL	VIR	LL	H	D	K	Q	K	E	L	F	W	F	D	.DK.	.L	Q	D	F	R	C	K	R	G	L	F	A	G	P	V	G	S	G	K	T	S	L	M	F	D	L	A	H	R	H	F	S	N	A	Q	V	I	T	I	E	D	165									
NTDB id 23426	M6 RS00890 WP 002986557.1	D	K	Q	L	S	R	L	S	V	G	D	Y	R	G	Y	ESL	VIR	LL	H	H	Q	N	K	S	V	H	Y	W	F	D	.G	L	T	K	V	A	N	Q	V	G	G	R	G	L	F	A	G	P	V	G	S	G	K	T	T	L	M	Y	Q	L	I	S	N	Y	H	Q	E	A	Q	V	I	S	I	E	D	167
NTDB id 584	DLJ51 RS00890 WP 019777327.1	G	E	T	A	A	L	R	L	S	T	V	G	D	Y	Q	R	ESL	VIR	LL	F	D	R	K	R	E	L	F	W	F	D	.G	L	N	A	L	L	P	K	I	I	G	R	G	L	F	A	G	P	V	G	S	G	K	T	T	L	M	Y	Q	L	I	S	N	Y	H	Q	E	A	Q	V	I	T	I	E	D	169
NTDB id 385	SMU RS09035 WP 002263435.1	G	K	V	I	S	R	L	S	S	V	G	D	Y	R	G	Y	ESL	VIR	LL	F	S	G	R	H	D	L	K	F	W	F	N	.S	M	D	L	I	L	N	E	I	K	R	G	L	F	A	G	P	V	G	S	G	K	T	S	L	M	Y	Q	L	V	K	L	R	F	E	T	K	Q	V	I	T	I	E	D	167
NTDB id 394	FSA28 RS09405 WP 002291652.1	G	K	V	I	S	R	L	S	S	V	G	D	Y	R	G	Y	ESL	VIR	LL	F	S	G	R	H	D	L	K	F	W	F	N	.S	M	D	L	I	L	N	E	I	K	R	G	L	F	A	G	P	V	G	S	G	K	T	S	L	M	Y	Q	L	V	K	L	R	F	E	T	K	Q	V	I	T	I	E	D	167
NTDB id 429	SGO RS09420 WP 012130942.1	.K	E	T	S	I	R	L	S	T	V	G	D	Y	R	G	Y	ESL	VIR	LL	H	D	E	E	Q	D	L	H	F	W	F	Q	.H	F	P	E	L	R	E	K	F	K	D	R	G	L	F	A	G	P	V	G	S	G	K	T	T	L	M	H	Q	L	A	K	L	F	K	Q	V	M	S	I	E	D	166		
NTDB id 500	SM12261 RS00945 WP 000249545.1	.K	M	A	S	R	L	S	T	V	G	D	Y	R	G	H	ESL	VIR	LL	H	D	E	E	Q	D	L	H	F	W	F	Q	.D	I	E	E	L	G	K	Q	Y	R	Q	R	G	L	F	A	G	P	V	G	S	G	K	T	T	L	M	H	E	L	S	K	S	L	F	K	Q	V	M	S	I	E	D	166		
NTDB id 270	KZH43 RS09265 WP 000249564.1	.K	I	A	S	R	L	S	T	V	G	D																																																																	

NTDB id 617	LCA RS06480 WP 011375001.1	P	E	I	V	A	P	E	F	L	Q	L	Q	V	N	D	N	A	G	L	S	Y	A	E	L	L	K	I	S	R	L	R	P	D	T	L	I	I	G	E	I	R	D	L	E	T	A	Q	Y	V	V	S	A	A	L	S	G	H	L	V	L	S	T	I	H	A	S	T	Q	G	V	A	R	L	D	L	G	I	S	E	L		253			
NTDB id 586	KW2 RS10855 WP 011836048.1	P	V	E	L	I	D	S	D	F	I	Q	L	Q	V	N	D	I	G	N	S	Y	D	E	L	I	K	L	S	R	H	R	P	D	L	L	I	V	G	E	I	R	D	Q	T	A	R	A	V	L	R	A	S	L	T	G	Y	T	V	F	S	T	I	H	A	S	V	K	G	V	V	Q	R	L	E	L	C	L	S	D	W		250			
NTDB id 23426	M6 RS00890 WP 002986557.1	P	V	E	I	K	N	H	Q	I	L	Q	L	Q	V	N	D	I	G	M	T	Y	D	N	L	I	K	L	S	R	H	R	P	D	L	I	L	V	G	E	I	R	D	S	T	A	R	A	V	I	R	A	S	L	T	G	A	M	V	F	S	T	I	H	A	K	S	I	P	G	V	A	R	M	L	E	L	G	V	T	K	A		252		
NTDB id 584	DLJ51 RS00890 WP 019777327.1	P	V	E	I	K	Q	D	N	L	Q	L	Q	L	N	P	S	I	G	M	T	Y	D	N	L	I	K	L	S	R	H	R	P	D	V	L	I	I	G	E	I	R	D	R	E	T	A	Q	A	V	I	R	A	S	L	T	G	I	R	V	F	S	T	V	H	A	K	S	I	P	G	V	A	R	M	L	E	L	C	V	S	D		254		
NTDB id 385	SMU RS09035 WP 002263435.1	P	V	E	I	K	Q	D	N	L	Q	L	Q	L	N	E	S	I	D	M	T	Y	D	N	L	I	K	L	S	R	H	R	P	D	I	L	I	I	G	E	I	R	D	K	E	T	A	R	A	V	I	R	A	S	L	T	G	A	M	V	F	S	T	I	H	A	K	S	I	P	G	V	A	R	M	L	E	L	G	T	S	S	E		252	
NTDB id 394	FS428 RS09405 WP 002291652.1	P	V	E	I	K	Q	D	N	L	Q	L	Q	L	N	E	S	I	D	M	T	Y	D	N	L	I	K	L	S	R	H	R	P	D	I	L	I	I	G	E	I	R	D	K	E	T	A	R	A	V	I	R	A	S	L	T	G	A	M	V	F	S	T	I	H	A	K	S	I	P	G	V	A	R	M	L	E	L	C	T	S	S	E		252	
NTDB id 429	SGO RS09420 WP 012130942.1	P	V	E	I	K	Q	E	D	N	L	Q	L	Q	L	N	E	T	I	G	L	T	Y	E	N	L	I	K	L	S	R	H	R	P	D	L	L	I	I	G	E	I	R	D	S	E	T	A	R	A	V	V	R	A	S	L	T	G	A	T	V	F	S	T	I	H	A	K	S	I	P	G	V	Y	E	R	L	L	E	L	G	V	S	E		251
NTDB id 500	SM12261 RS00945 WP 000249545.1	P	V	E	I	K	Q	D	N	L	Q	L	Q	L	N	E	A	I	G	L	T	Y	E	N	L	I	K	L	S	R	H	R	P	D	L	L	I	I	G	E	I	R	D	S	E	T	A	R	A	V	V	R	A	S	L	T	G	A	T	V	F	S	T	I	H	A	K	S	I	P	G	V	Y	E	R	L	L	E	L	G	V	S	E		251	
NTDB id 270	KZH43 RS09265 WP 000249564.1	P	V	E	I	K	Q	D	N	L	Q	L	Q	L	N	E	A	I	G	L	T	Y	E	N	L	I	K	L	S	R	H	R	P	D	L	L	I	I	G	E	I	R	D	S	E	T	A	R	A	V	V																																			

logo

NTDB id 617 LCA RS06480 WP 011375001.1	QLRACLTGIAVQSLVTKDDVVQA...HYELLTGSDYFSKKEGGCDV.....	296
NTDB id 586 KW2 RS10855 WP 011836048.1	ELKNGLEAVVYQRLIAGKGVLDIAKSKFDTWSPKKWNEKTENLYANGHLTAIEEAEREKISINQASKIDTTDGESFE	326
NTDB id 23426 M6 RS00890 WP 002986557.1	ELSNCLALIAVQRLINGGALIDSTQNEFEYSSSNWNQQIDQLLEAGHLNPKQAKLEKII.....	312
NTDB id 584 DLJ51 RS00890 WP 019777327.1	ELDNCLAGIAVQRLIGGGGLIDFAQDHFQNHQAECWNEKIDQLLAAGHLTEEEAAAAEKIKD.....	315
NTDB id 385 SMU RS09035 WP 002263435.1	ELQNALRGIVYQRLIGGGGIIDFAKGDYQNHSAKKWNKQIYDLFTAGYITEGEAQAEIIE.....	313
NTDB id 394 FSA28 RS09405 WP 002291652.1	ELQNALCGIVYQRLIGGGGIIDFAKGDYQNHSAKKWNKQIYDLFTAGYITEGEAQAEIIE.....	313
NTDB id 429 SGO RS09420 WP 012130942.1	ELKIVLQGICYQRLIGGGGVIDFASDNYQEHEPTVWNQQIDQLLAAGHIHPEQAEAEKIRNQQAKTSY.....	319
NTDB id 500 SM12261 RS00945 WP 000249545.1	ELAVVLQGVICYQRLIGGGGIVDFANKDYQEHQSTSWNAQIDQLLKDGHITSLQAETEKISYS.....	313
NTDB id 270 KZH43 RS09265 WP 000249564.1	ELAVVLQGVICYQRLIGGGGIVDFASRDYQEHQAAKWNEQIDQLLKDGHITSLQAETEKISYS.....	313
NTDB id 229 SPD RS09895 WP 000249564.1	ELAVVLQGVICYQRLIGGGGIVDFASRDYQEHQAAKWNEQIDQLLKDGHITSLQAETEKISYS.....	313
NTDB id 195 SPR RS09430 WP 000249564.1	ELAVVLQGVICYQRLIGGGGIVDFASRDYQEHQAAKWNEQIDQLLKDGHITSLQAETEKISYS.....	313
NTDB id 160 SP RS10380 WP 000249564.1	ELAVVLQGVICYQRLIGGGGIVDFASRDYQEHQAAKWNEQIDQLLKDGHITSLQAETEKISYS.....	313
consensus	*! ! ** !!*!***** ** * * ** ***** ** ** **	

- non conserved
- similar
- ≥ 50% conserved