

SUPPLEMENTARY DATA

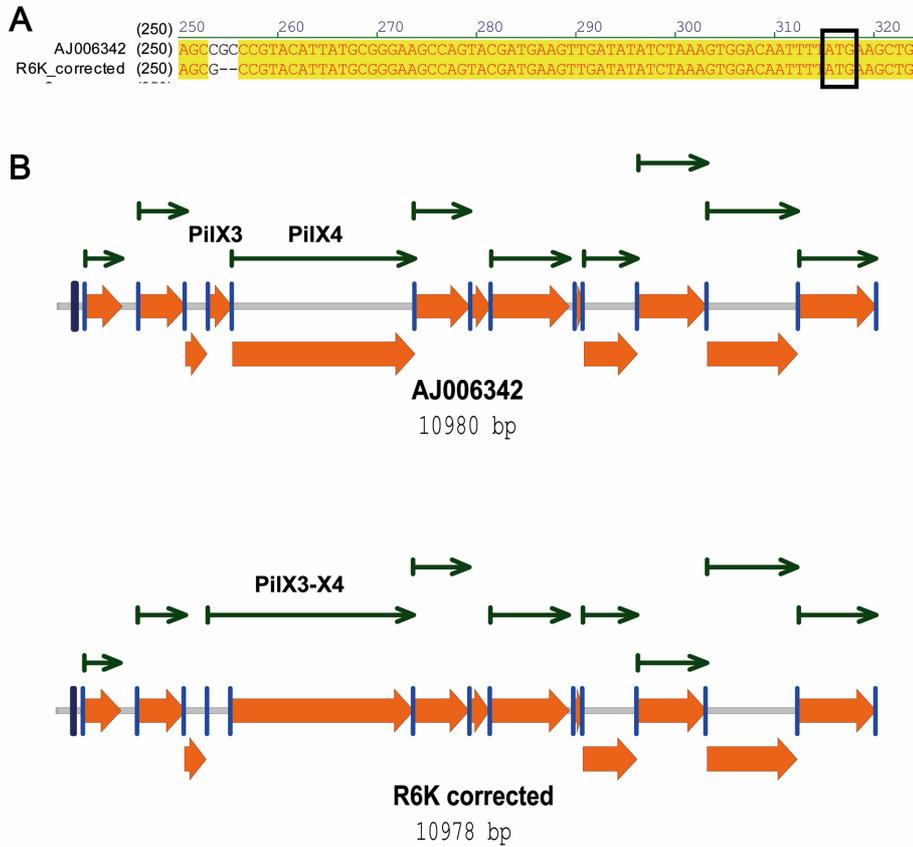
Supplementary Figure 1

A	1	MGAIESR	KLL	ASET	PV	QQFI	PYSH	HV	TD	TI	ISTK	NAEY	LS	VWKI	DR	SHQ																													
	51	SASE	ADV	FQW	IREL	NN	TL	LRG	ISSA	NLS	LWT	HIVR	RR	VY	EY	PDAE	FD	NV	FC																										
	101	RQLD	EKY	RES	FTG	NLM	VND	LYLT	TV	YR	VPV	SDKV	LS	FF	AK	RERE	TP	DQ	KK																										
	151	HRQE	SC	IKAL	EDIN	R	TL	GQS	FKRY	GA	ELLS	VYEK	GG	HAF	S	APLE	FL	AR	LV																										
	201	NGEH	IP	M	PIC	RDR	FSD	YMAV	NRPM	F	SK	WGE	VGEL	R	SL	TGL	RR	FG	ML	EIRE																									
	251	YDDA	TE	PG	Q	NVLE	S	DY	E	FL	TH	S	F	S	V	L	RPAA	KE	YL	QR	HQKN	LID	ARD																						
	301	VATD	QIE	EID	EALN	QL	IS	GH	FVMG	EH	H	CTL	TVY	GE	TV	QQV	RDN	LA	HA	SA	A																								
	351	MLDV	AV	LP	K	VDLA	LE	AG	YW	AQLP	AN	W	Q	WR	PR	PA	IT	SL	N	FL	S	F	PF	HNF																					
	401	MSGK	PT	GN	PW	GPAV	T	IL	K	TV	SGT	PL	Y	F	N	F	H	ASKE	E	E	D	A	T	KRLL	GN	T	MLI																		
	451	GQSS	SG	K	TVL	LGFL	LA	QA	QK	FKPT	I	V	A	F	D	K	DRG	ME	I	S	I	R	A	MGGR	YL	PL	K	T																	
	501	GEP	S	G	F	N	P	F	Q	L	P	P	T	H	A	N	L	I	F	LKQ	F	V	K	L	A	A	AGGE	V	T	H	R	D	E	EEID	QA	ITAM									
	551	MSD	S	I	D	K	S	L	R	RLS	L	L	L	Q	F	L	P	NPR	S	D	D	M	D	A	R	P	T	V	H	A	R	L	V	K	W	CEGG	D	Y	G	W	L	F			
	601	DNPT	D	A	L	D	L	S	THQI	Y	G	F	D	I	T	EFLD	N	P	E	A	R	P	V	M	M	L	L	Y	R	T	ESM	I	D	G	R	R	F	M							
	651	YV	DE	F	W	K	P	L	QDEY	F	E	D	L	A	K	NKQ	T	I	R	K	Q	N	GIF	V	F	A	T	Q	E	P	S	D	A	L	E	S	N	I	A	K					
	701	TLIQ	Q	C	A	T	Y	I	FLAN	P	K	A	D	Y	E	D	Y	T	Q	G	F	K	L	T	D	SE	F	E	L	V	R	G	L	E	F	S	R	R	F	L	I	K	Q		
	751	GDQ	S	A	L	A	E	M	N	LGK	F	R	T	I	V	D	G	ET	V	E	R	D	F	D	E	LL	V	L	S	G	T	P	D	N	A	E	I	A	E	S	I	I	A	E	
801	VGDD	P	A	V	W	L	P	I	F	L	D	R	V	K	A	E	R	S	D	V																									

B	1	MGAIESR	KLL	ASET	PV	QQFI	PYSH	HV	TD	TI	ISTK	NAEY	LS	VWKI	DR	SHQ																														
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	451	GQSS	SG	K	TVL	LGFL	LA	QA	QK	FKPT	I	V	A	F	D	K	DRG	ME	I	S	I	R	A	MGGR	YL	PL	K	T																		
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	551	MSD	S	I	D	K	S	L	R	RLS	L	L	L	Q	F	L	P	NPR	S	D	D	M	D	A	R	P	T	V	H	A	R	L	V	K	W	CEGG	D	Y	G	W	L	F				
	601	DNPT	D	A	L	D	L	S	THQI	Y	G	F	D	I	T	EFLD	N	P	E	A	R	P	V	M	M	L	L	Y	R	T	ESM	I	D	G	R	R	F	M								
	651	YV	DE	F	W	K	P	L	QDEY	F	E	D	L	A	K	NKQ	T	I	R	K	Q	N	GIF	V	F	A	T	Q	E	P	S	D	A	L	E	S	N	I	A	K						
	701	TLIQ	Q	C	A	T	Y	I	FLAN	P	K	A	D	Y	E	D	Y	T	Q	G	F	K	L	T	D	SE	F	E	L	V	R	G	L	E	F	S	R	R	F	L	I	K	Q			
	751	GDQ	S	A	L	A	E	M	N	LGK	F	R	T	I	V	D	G	ET	V	E	R	D	F	D	E	LL	V	L	S	G	T	P	D	N	A	E	I	A	E	S	I	I	A	E		
801	VGDD	P	A	V	W	L	P	I	F	L	D	R	V	K	A	E	R	S	D	V																										

Supplementary Figure 1. Tandem Mass Spectrometry of TrwK. Selected protein bands were excised manually from the gel and subjected to in-gel digestion with trypsin and analyzed by LC-MS/MS. Obtained spectra were processed using ProteinLynx Global Server and searched against NCBI databases using MASCOT search engine. Amino acid sequences of the bands with MW_{app} 94 kDa (Panel A) and MW_{app} of 80 kDa (Panel B) in the SDS-PAGE (Fig.1) were identified by peptide fragment fingerprinting as *E. coli* TrwK. Comparison of sequence coverage in Panels A and B shows that fragment B is missing peptides in its N-terminus, suggesting a cleavage site of the protein in aac. 173.

Supplementary Figure 2



Supplementary Figure 2. PilX3-PilX4 gene fusion in R6K. The intergenic region between PilX3 and PilX4 in R6K (accession number AJ006342) was sequenced. An error was found resulting in a bad annotation of the R6K genome (*Panel A*). As a result two genes were annotated instead of only one (*Panel B*). The ATG codon (boxed in Panel A)) indicates the N-terminus of PilX4 in previous annotations.