

Supporting Information

Aeby et al. 10.1073/pnas.0901575106

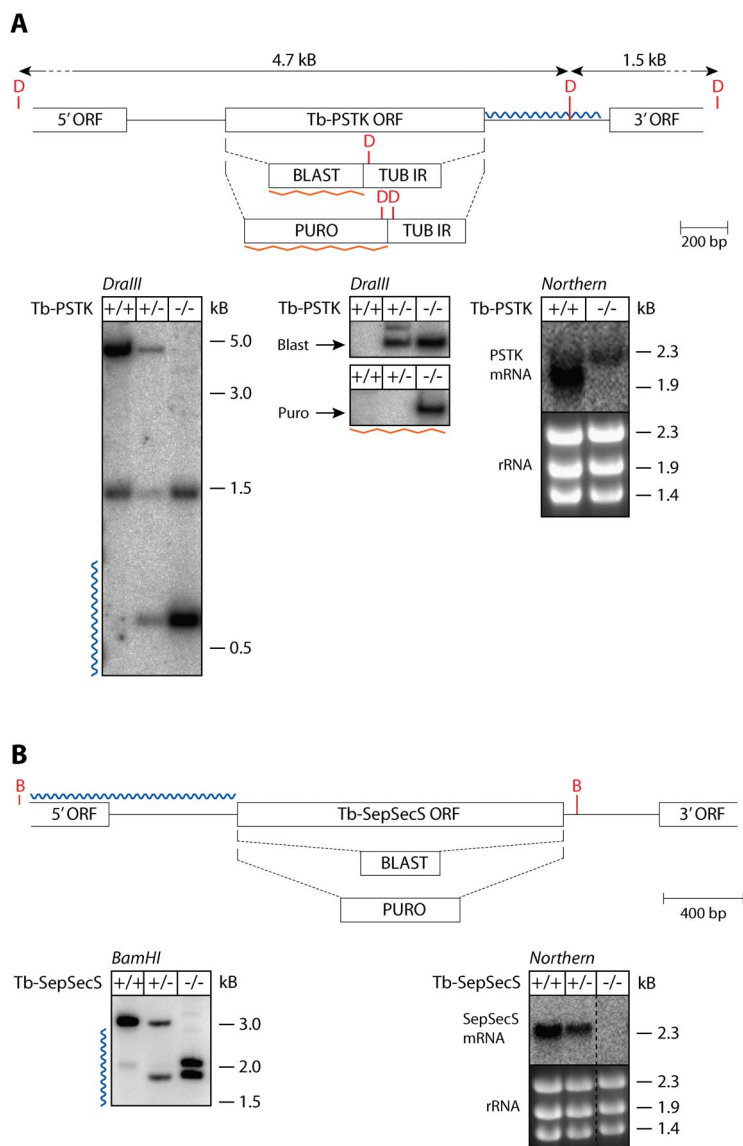


Fig. S1. Generation of Tb-PSTK and Tb-SepSecS KO cell lines. (A) (Upper) Schematic to scale drawing of the WT Tb-PSTK-encoding locus and the situation after homologous recombination leading to replacement of the two loci by blasticidine (BLAST) and puromycin (PURO) resistance genes, respectively. *DrallI* (D) restriction sites are indicated. The lengths of the 2 *DrallI* fragments of WT cells that hybridize with the 3' flank of the PSTK locus (jagged line) are indicated. Tb-PSTK is expressed only at very low level. Thus, to express sufficient amounts of the BLAST and the PURO genes the 3'-flanking region (TUB IR) of the highly expressed α -tubulin gene was inserted between the stop codons of the resistance marker genes and their endogenous 3'-flanking regions. (Lower) (Left and Center) *DrallI*-digested genomic DNA of the parent cell line (+/+) and the resulting cell lines after replacement of the first (+/-) and the second (-/-) PSTK allele were hybridized with a probe corresponding to either the 3'-flank of the PSTK locus (jagged line) or with probes recognizing the BLAST and PURO genes (wiggly lines), respectively. (Right) Total RNA from the parent and the Tb-PSTK KO cell lines was analyzed by Northern blots using the Tb-PSTK ORF as a probe. The position of the Tb-PSTK mRNA is indicated. An unspecific cross-reacting band comigrating with cytosolic rRNA is present in both cell lines. The ethidium bromide stain shows the rRNA region that serves as a loading control and as size markers. (B) (Upper) Schematic to scale drawing of the WT Tb-SepSecS-encoding locus and the situation after homologous recombination leading to replacement of the two loci by blasticidine (BLAST) and puromycin (PURO) resistance genes, respectively. *BamHI* (B) restriction sites are indicated. (Lower) (Left) Southern blot of *BamHI*-digested genomic DNA of the indicated cell lines using a probe corresponding to the 5'-flank of the Tb-SepSecS ORF gene. (Right) Northern blot of total RNA from the indicated cell lines probed for the Tb-SepSecS ORF.