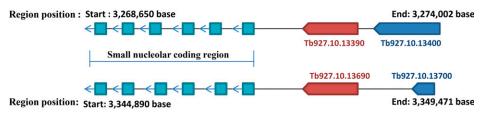
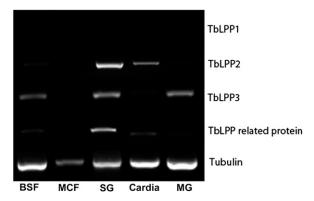
10 Chromosome



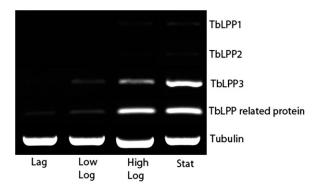
Identity/Similarity: Tb927.10.13390/Tb927.10.13690 (I = 99.1%, S= 99.1%)

Tb927.10.13400/Tb927.10.13700 (I =96.7%, S= 100%)

SUPPLEMENTAL FIGURE 1. Organization of *TbLPP2* and *TbLPP2-related protein* on chromosome 10. The locus containing both genes was identified from TriTrypDB (http://tritrypdb.org/tritrypdb/). Arrows indicate direction of transcription. Each locus was drawn according to the map provided at TriTrypDB for chromosome 10. Numbers corresponding to the start point and the end point refer to the nucleotide position of the chromosome 10 that contain the locus from which both genes were taken.



SUPPLEMENTAL FIGURE 2. Differential transcript abundance of *TbLPPs*. Reverse transcriptase polymerase chain reaction (PCR) using gene-specific primers in a 35-cycle PCR. Gel agarose visualization of *TbLPP*-amplified gene products from bloodstream form (BSF), metacyclic form (MCF), midgut (MG), cardia, and salivary gland (SG) parasites from 42-day-old infected tsetse flies.



Supplemental Figure 3. Differential transcript abundance of *TbLPP*s in procyclic parasites from different phases of cellular growth. Reverse transcriptase polymerase chain reaction (RT-PCR) using gene-specific primers in a 35-cycle PCR. Gel agarose visualization of *TbLPP*-amplified gene products from different phases of cellular growth. RT-PCR using gene-specific primers in a 35-cycles PCR from parasites from lag, low log, high log, and stationary phases.

SUPPLEMENTAL TABLE 1 ANOVA/Tukey's multicomparison for differential transcript abundance of TbLPPs in different tissues

	Significant	Summary	Adjusted P value
	TbL	PP2	
BSF vs. MCF	Yes	*	0.0184
BSF vs. SG	Yes	****	< 0.0001
BSF vs. PV	Yes	**	0.0073
BSF vs. MG	No	ns	0.7196
MCF vs. SG	Yes	****	< 0.0001
MCF vs. PV	No	ns	0.97
MCF vs. MG	Yes	**	0.0029
SG vs. PV	Yes	****	< 0.0001
SG vs. MG	Yes	****	< 0.0001
PV vs. MG	Yes	**	0.0012
	TbL	PP3	
BSF vs. MCF	No	ns	0.6087
BSF vs.SG	Yes	*	0.0434
BSF vs. PV	Yes	*	0.049
BSF vs. MG	No	ns	0.9592
MCF vs. SG	Yes	**	0.0048
MCF vs. PV	No	ns	0.4008
MCF vs. MG	No	ns	0.9278
SG vs. PV	Yes	***	0.0004
SG vs. MG	Yes	*	0.0155
PV vs. MG	No	ns	0.136
	TbLPP2-rela	ated protein	
BSF vs. MCF	No	ns	0.9391
BSF vs. SG	Yes	*	0.0298
BSF vs. PV	No	ns	0.9817
BSF vs. MG	No	ns	0.5675
MCF vs. SG	No	ns	0.0951
MCF vs. PV	No	ns	0.9994
MCF vs. MG	No	ns	0.2276
SG vs. PV	No	ns	0.0681
SG vs. MG	Yes	**	0.003
PV vs. MG	No	ns	0.3055

ANOVA = analysis of variance; BSF = bloodstream form; MCF = metacyclic form; MG = midgut; ns = nonsignificant; PV = proventriculus; SG = salivary glands; TbLPP = Trypanosoma brucei lipid phosphate phosphatases gene.

TbLPP2: ANOVA, F = 119.9; df = 4, 10, P = 0.0008.

TbLPP3: ANOVA, F = 124, df = 4, 10, P = 0.0008.

TbLPP2-related protein: ANOVA, F = 7.023, df = 4, 10; P = 0.0058.

*Analyses were performed using GraphPad Prism 6 (La Jolla, CA).

Supplemental Table 2

ANOVA/Tukey's multicomparison for differential transcript abundance of TbLPPs in procyclic parasites from different phases of cellular growth

cellular growth			
Phase	Significant	Summary	Adjusted P value
	TbLPP1		
Lag vs. low log	No	ns	0.8953
Lag vs. high log	Yes	*	0.02
Lag vs. stationary	Yes	**	0.0012
Low log vs. high log	No	ns	0.0524
Low log vs. stationary	Yes	**	0.0025
High log vs. stationary	No	ns	0.1686
	TbLPP2		
Lag vs. low log	No	ns	> 0.9999
Lag vs. high log	No	ns	0.998
Lag vs. stationary	No	ns	0.352
Low log vs. high log	No	ns	0.9956
Low log vs. stationary	No	ns	0.3303
High log vs. stationary	No	ns	0.4311
	TbLPP3		
Lag vs. low log	No	ns	0.7903
Lag vs. high log	Yes	*	0.0158
Lag vs. stationary	Yes	****	< 0.0001
Low log vs. high log	No	ns	0.057
Low log vs. stationary	Yes	****	< 0.0001
High log vs. stationary	Yes	****	< 0.0001
Tbl	LPP2-related	protein	
Lag vs. low log	No	ns	0.4134
Lag vs. high log	Yes	***	0.0001
Lag vs. stationary	Yes	****	< 0.0001
Low log vs. high log	Yes	***	0.0004
Low log vs. stationary	Yes	****	< 0.0001
High log vs. stationary	Yes	**	0.0016

ANOVA = analysis of variance; ns = nonsignificant; $TbLPP = Trypanosoma\ brucei$ lipid phosphate phosphatases gene. TbLPPI: ANOVA, F = 16.62, df = 3, 8; P = 0.0008. TbLPP2: ANOVA, F = 15.16, df = 3, 8; P = 0.2832. TbLPP3: ANOVA, F = 71.16, df = 3, 8; P < 0.0001. TbLPP2-related protein: ANOVA, F = 92.36, df = 3, 8; P < 0.0001. *Analyses were performed using GraphPad Prism 6.

Supplemental Table 3 List of gene specific primers

Gene	Orientation (5'-3')	Sequence
Tb927.7.480 (TbLPP1)	Forward	ACGGAGCCACTACGCGGGTA
	Reverse	CGGGGCACAAGCACTGCGAT
Tb927.10.13400 (TbLPP2)	Forward	CGAAAGCGGGACGTGCTGTTCG
	Reverse	AGCGTGCGCCACACAGATGC
Tb927.10.13700 (TbLPP2-related protein)	Forward	GCATTCTCCCGCAACTTCGTCG
1 /	Reverse	GTTATATCAGACACCACCTGC
Tb927.10.13930 (TbLPP3)	Forward	GATCGGTTGAGGCGTGAGGGC
	Reverse	GCTCCAGACGGCGGGGCACTAG