

Supplemental information

Transcriptome analysis based detection of *Plasmodium falciparum* development in *Anopheles stephensi* mosquitoes

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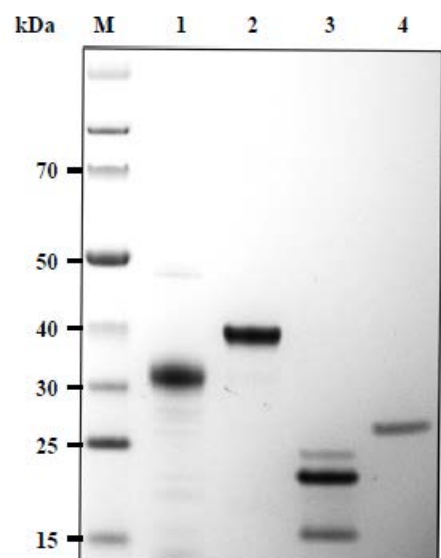


Figure S1. SDS-PAGE analysis of His-tag purified, recombinant *Pf*.WARP, *Pf*.RACK, *Pf*.TRP1 and *Pf*. conserved *Plasmodium* protein. Proteins were separated on 4-12% SDS-PAGE gradient under reducing conditions and stained with Simply Blue Safestain. Lane M, Molecular weight marker; Lane 1, *Pf*.WARP; Lane 2, *Pf*.RACK; Lane 3, *Pf*.TRP1; Lane 4, *Pf*. conserved *Plasmodium* protein.

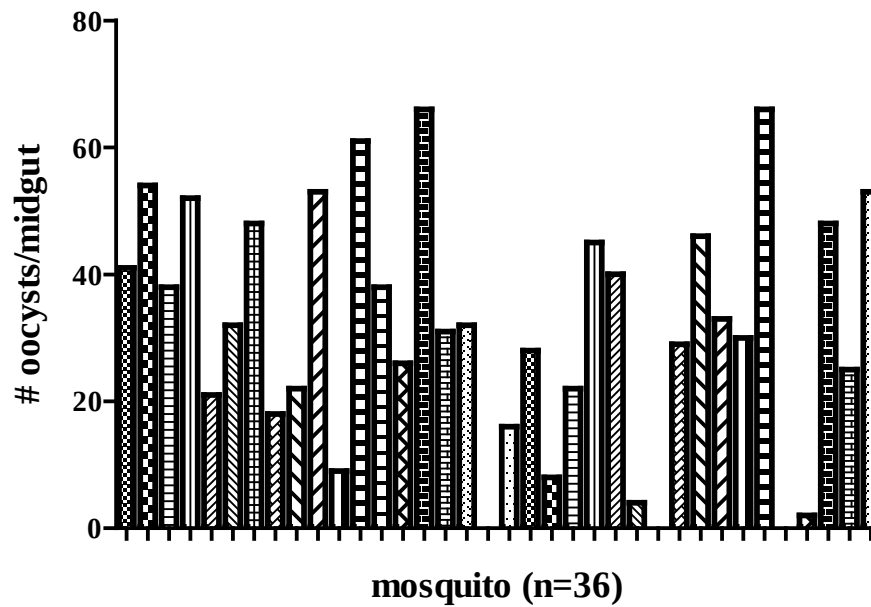


Figure S2. Prevalence and oocyst burden of a representative *P. falciparum* infection of *A. stephensi* mosquitoes. On day 8 post-infection, fed mosquitoes (n=36) fed mosquitoes were dissected and stained with mercurochrome and oocysts counts were then determined by microscopy.

Table S2. Primers used for quantitation of RNA transcript by qPCR.

Gene	PlasmoDB ID	Forward Primer	Reverse Primer
Conserved	PF3D7_0931300	ATGAAGGGCAAAGTTGTTGA	TTATTCGGTACCCGTCAAAC
CSP	PF3D7_0304600	CACAATATGCCAAATGACCC	AGGTTTATTAGCAGAGCCAG
DHFS-FPGS	PF3D7_1324800	AGCTACCGAGCAAATACAAC	TCAAGTTTCTCGGCTTTGTT
ALBA1	PF3D7_0814200	ACCAGATGTGGAAGTACAGT	CCTCTTCTGAATGGCCTAGA
GAPDH	PF3D7_1462800	AACAGGTGTAGCTTTCAGAG	GCTAAACCAGCTTTCATGTC
H2B	PF3D7_1105100	CACCCAGATACTGGTATTTCA	GTTACAGCTTTGGTTCCTTC
P23	PF3D7_1453700	GCTGGATTAGGTGGTATGGA	ACTGCTGCATCAGGAATTTT
RACK	PF3D7_0826700	GTATCAACACCAACAGACCC	TGGTCCCAAGAACCTGATAA
TRP1	PF3D7_1438900	AGGCTGTAGTGTGGATAGTA	GTTGAACAACACCTTGCTTG
WARP	PF3D7_0801300	GGCTCATATGTCAGTTGTCC	TTAGGAGCATCCTTTCGAGT

Table S3. Primers sets used for the amplification of *Pf*.WARP, *Pf*.RACK, *Pf*.TRP1 and *Pf*. conserved *Plasmodium* protein antigenic domains used for recombinant expression in *E. coli*.

<i>P. falciparum</i> antigen	Antigenic domain	Primers set
<i>Pf</i> .WARP	N ₂₆ -S ₂₉₀	5' primer: 5' - ATACTATCGCGGCCGCTAACGTAGTGTCTCATAACTCTATG-3' 3' primer: 5' - ATAGTATAGGCGCGCCTGATTTATTCTTATCACATATTTTTTGA-3'
<i>Pf</i> .RACK	M ₂ -V ₃₂₃	5' primer: 5' - ATACTATCGCGGCCGCTATGGATAATATAAAGAAGCTG-3' 3' primer: 5' - ATAGTATAGGCGCGCCAAGTGTGTTTTTAACATTCATATAC-3'
<i>Pf</i> .TRP1	A ₂ -L ₁₉₅	5' primer: 5' ATACTATCGCGGCCGCTGCATCATATGTAGGAAGAGAAGC-3' 3' primer: 5' - ATAGTATAGGCGCGCCCAACTTTGATAAATATTCATAAC-3'
<i>Pf</i> . conserved <i>Plasmodium</i> protein	M ₁ -E ₃₀₅	5' primer: 5' ATACTATCGCGGCCGCTATGCTTTCCATAGCAAGTACCTTC-3' 3' primer: 5' - ATAGTATAGGCGCGCCTTCATTTTTGTTTATTCCTCATC-3'