

Trafficking of the exported *P. falciparum* chaperone PfHsp70x.

Manuel Rhiel^{1, 2}, Verena Bittl¹, Anke Tribensky¹, Sarah C Charnaud^{3, 4}, Maja Strecker¹, Sebastian Müller¹, Michael Lanzer⁵, Cecilia Sanchez⁵, Christine Schaeffer-Reiss⁶, Benoit Westermann⁶, Brendan S Crabb^{3, 4, 7}, Paul R Gilson^{3, 4}, Simone Külzer^{1, 8}, and Jude M Przyborski^{1*}

Legends to Supplementary Material

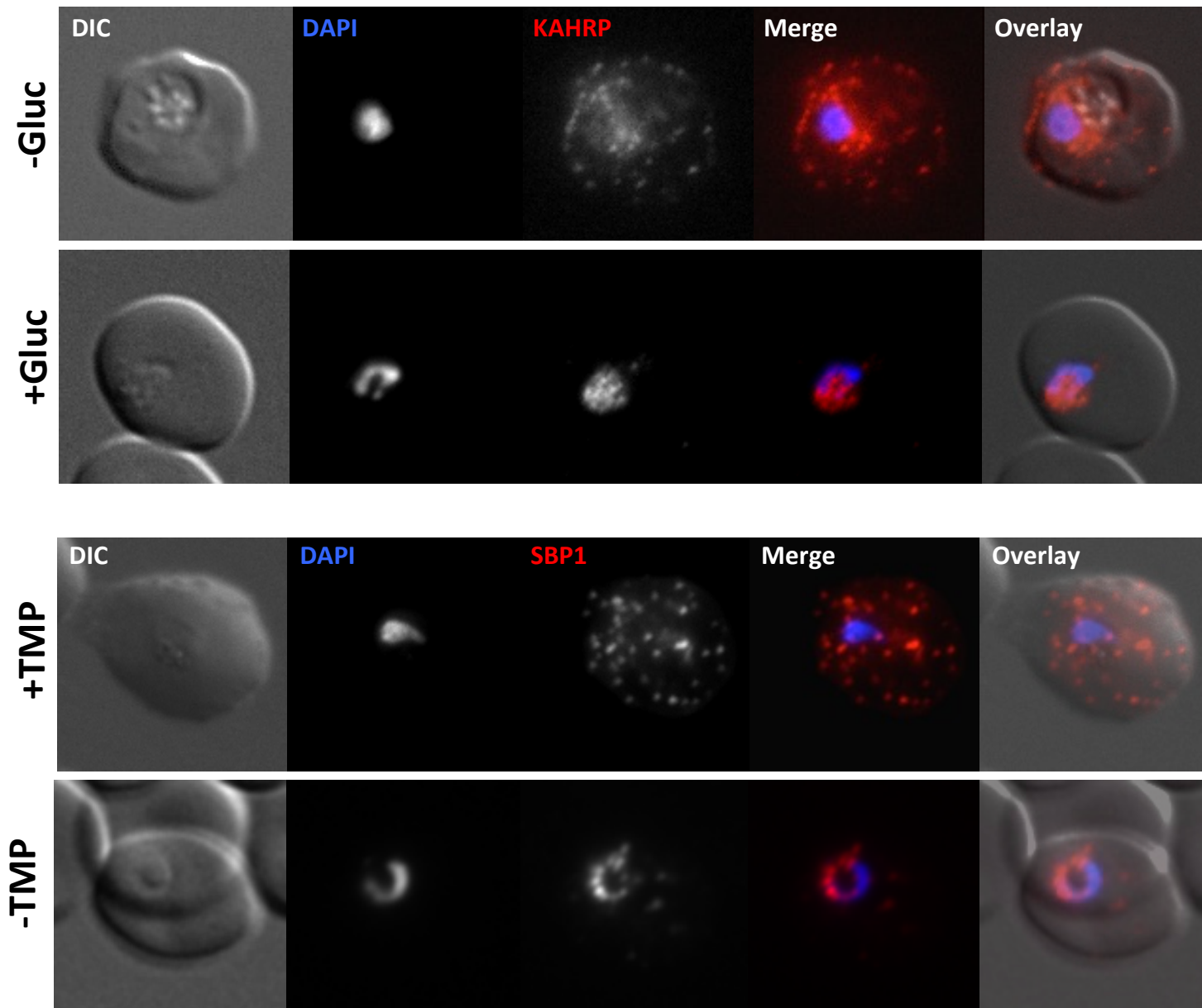
Supplementary Figure S1. Trafficking of KAHRP and SBP1 is blocked upon inactivation of PTEX.

DIC, differential interference contrast; in merge and overlay blue, Hoechst (nuclear stain); green, GFP; red, specific antibody staining. Pictures are representative of at least 10 individual observations.

Supplementary Table S2. Oligonucleotides and cloning strategy

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Supplementary Figure S1

Supplementary Table S2: Oligonucleotides used in this study

Name	Sequence 5'→3'
GFP1_10_oligo_F	CTAGGATGAGTAAAGGAGAAGAAGCTTTTCACTGGAGGTAC
GFP1_10_oligo_R	CTCCAGTGAAAAGTTCTTCTCCTTTACTCATC
Hsp70x_Xho_F	<u>ggctcgag</u> ATGAAGACAAAAATTTGTAGTTATATTC
Hs70x_40_A_R	<u>ggcctagg</u> TAAATCAATACCAATTGCAACCTCTG
Hsp70x_FLP_All_R	<u>ggcctagg</u> ACTATTATTAGCTTCTTCACTTGCTGTATGTACTGTTGTTGTTGC
Hsp70x_E5/6D_All_R	<u>ggcctagg</u> ACTGTCGTCAGCATTATTACTTGCTGTATGTACTGTTGTTGTTGC
Hsp70x_E6A_All_R	<u>ggcctagg</u> ACTAGCTTCAGCATTATTACTTGCTGTATGTACTGTTGTTGTTGC
Hsp70x_E5/6K_All_R	<u>ggcctagg</u> ACTTTTTTTAGCATTATTACTTGCTGTATGTACTGTTGTTGTTGC
Hsp70x_N2/3A_All_R	<u>ggcctagg</u> TGATTCTTCTGCAGCAGCACTTGCTGTATGTACTGTTGTTG
Hsp70x_SCR_All_R	<u>ggcctagg</u> TTCACCTTCACTATTAGCATTGCTGTATGTACTGTTGTTGTTGC
Hsp70x_S1A_All_R	<u>ggcctagg</u> ACTTTCTTCAGCATTATTAGCTGCTGTATGTACTGTTGTTGTTGC
Hsp70x_S7A_All_R	<u>ggcctagg</u> AGCTTCTTCAGCATTATTACTTGCTGTATGTACTGTTGTTGTTGC
Sew_F_70x+STV	CAACAGTACATACACATTATGAAAATTATC
Sew_R_70x+STV	GATAATTTTCATAATGTGTATGTACTGTTG
stev ^{AB0rev}	<u>ggcctagg</u> TTTCTTTATTGCGTCTTCG
Pfa660w_70x_A_R	<u>ggctcgag</u> ATGGCAACCTTAAGGAAAAGCTATGTACC
Pfa660w_70x_X_F	<u>ggcctagg</u> TGATTCTTCTGCATTGTTACTTGACACAATTCAGTGAATTATTAAGGG
Flp_2NA_All_R	<u>ggcctagg</u> ACTGGCTGCAGCTTCTTCACTTGCTGTATGTACTGTTGTTGTTGC
Scr_2EA_All_R	<u>ggcctagg</u> TGCACTAGCACTATTAGCATTGCTGTATGTACTGTTGTTGTTGC

Restriction sites underlined; coding regions in capital letters

Construct	Reverse Primer	Changed Export Motif
S1A	Hsp70x_S1A_All_R	ANNAEES
S7A	Hsp70x_S7A_All_R	SNNAEAA
E6A	Hsp70x_E6A_All_R	SNNAEAS
E5/6K	Hsp70x_E5/6K_All_R	SNNAKKS
E5/6D	Hsp70x_E5/6D_All_R	SNNADDS
N2/3A	Hsp70x_N2/3A_All_R	SAAAEES
SCR	Hsp70x_SCR_All_R	SESEAN
FLP	Hsp70x_FLP_All_R	SEEANNS
FLP/2NA	Flp_2NA_All_R	SEEANNS
SCR/2EA	Scr_2EA_All_R	SESEAN

Changes are highlighted in bold