

# SUPPLEMENTAL INFORMATION

## **Epigenetic inhibitors target multiple stages of *Plasmodium falciparum* parasites**

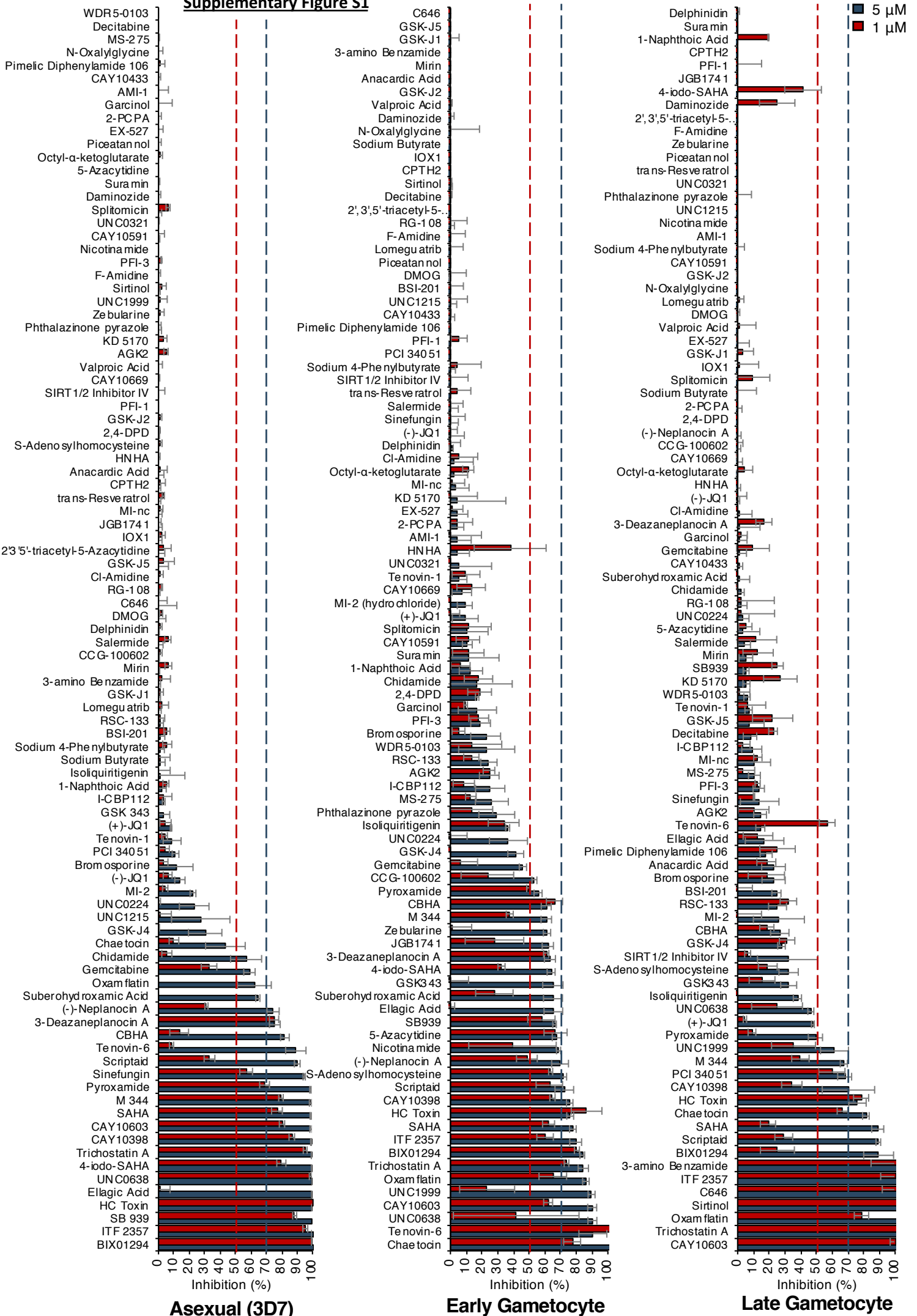
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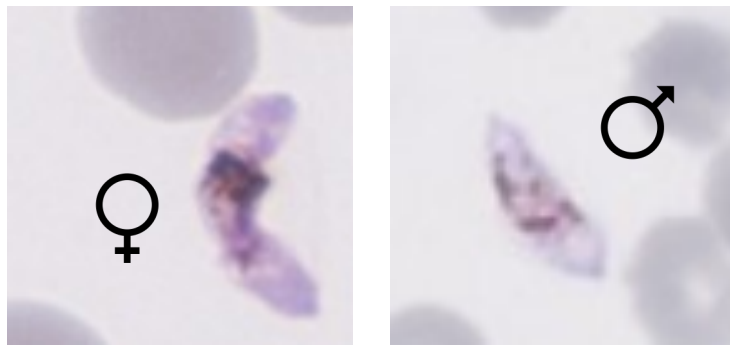
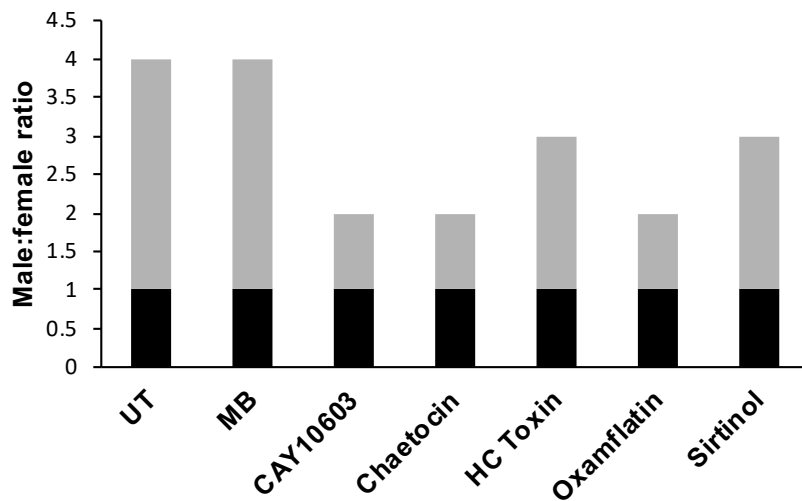
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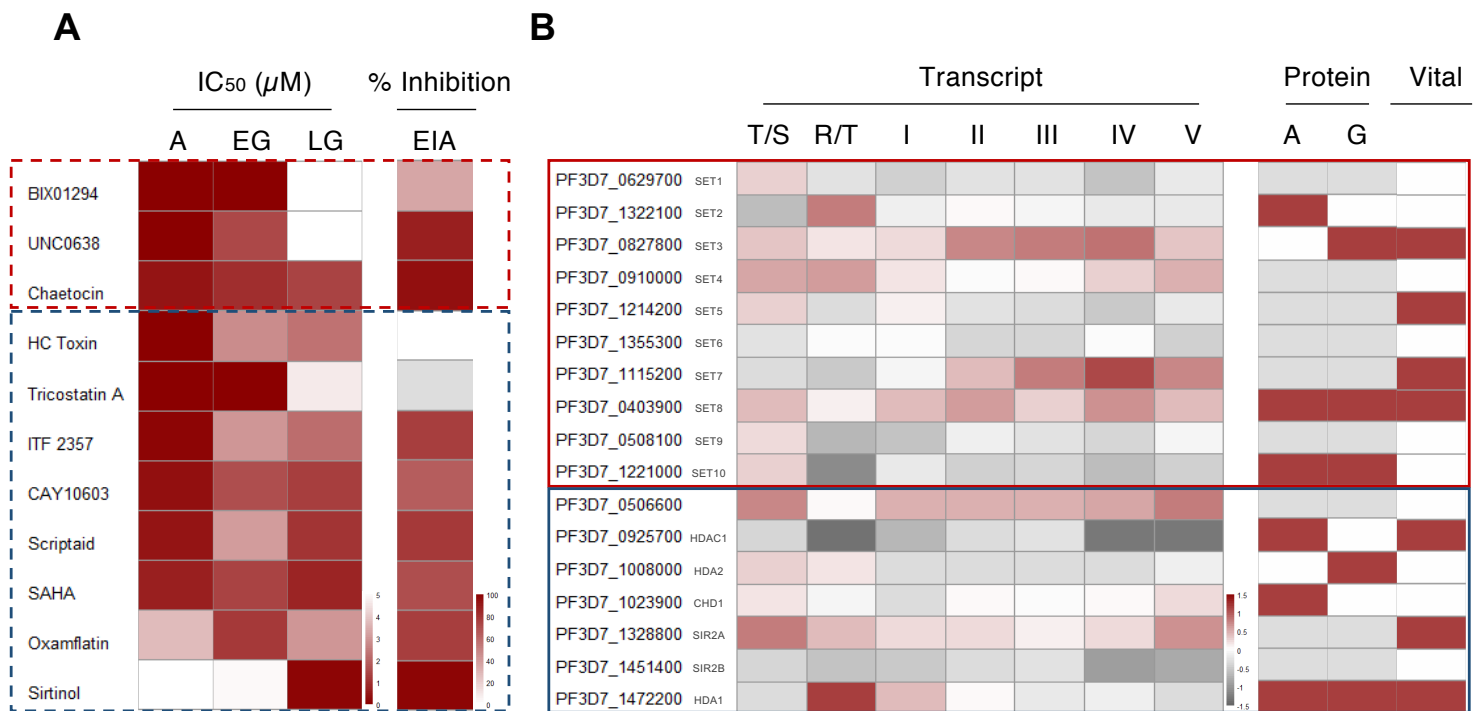
**Supplementary Figure S1**





### **Supplementary Figure S2:**

Male:Female gametocyte ratio (males in black bars, females in grey bars) affected by selected compounds after 48 h treatment. Stage V **male** gametocytes have a length to width ratio of ~2:1, and the cytoplasm appears pale blue following Giemsa staining. Stage V **female** gametocytes are more elongated (length to width ratio of ~3:1) and slightly bowed with a bright Giemsa stained cytoplasm. The difference in cytoplasm density may be due to the presence of osmiophilic bodies in female gametocytes, electron-dense organelles that are important for gametocyte egression from the erythrocyte during maturation within the mosquito. Gametocytes were binned morphologically after evaluating >1000 cells each on Giemsa stained slides.



### Supplementary Figure S3:

**(A)** Pan-reactive HKMTi (red dotted block) and HDACi (blue dotted line) activity (IC<sub>50</sub>) in asexual (A), early gametocytes (EG), late stage gametocytes (LG) and in activated gametocytes (EIA, % inhibition). **(B)** Qualitative correlation between the expression levels of family members of HKMTs (red solid line) and HDACs (blue solid line), transcripts (in heatmap colours) or protein levels (red, present; white, not present; grey, unknown) across asexual stages trophozoites (T), schizonts (S) or rings (R) or the different gametocyte stages (I-V). The PlasmoDB codes ([www.plasmodb.org](http://www.plasmodb.org)) for the effector proteins are indicated. Essentiality of the genes upon gene disruption is shown (red, refractory to gene disruption; white, viable after gene disruption; [www.phenoplasmodb.org](http://www.phenoplasmodb.org)).