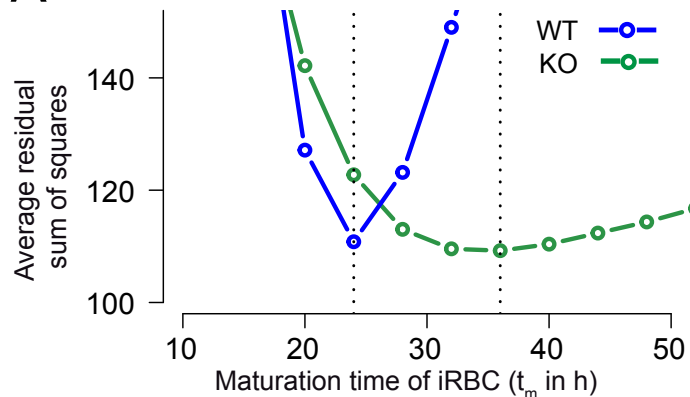
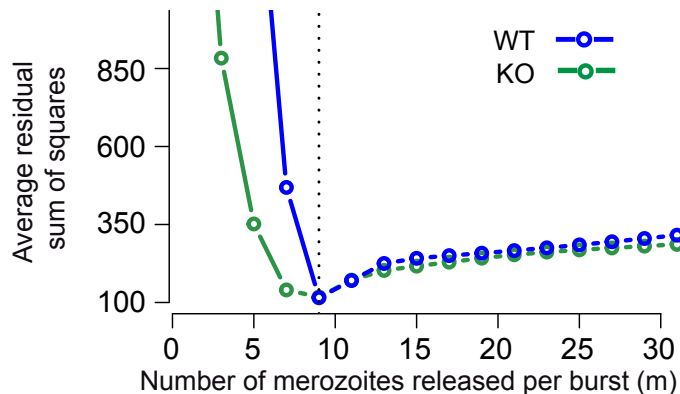


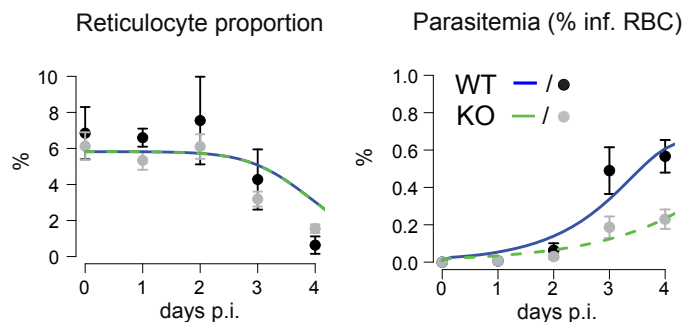
A



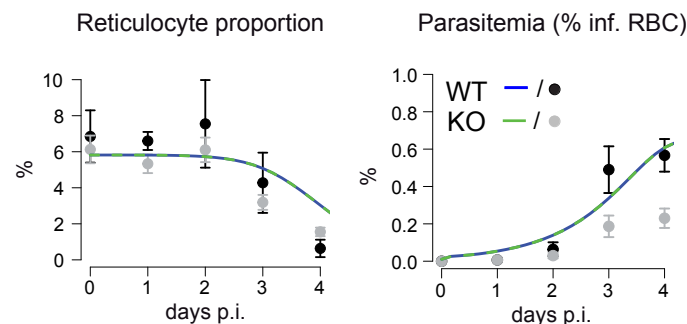
C



B



D



Supplementary Figure S4: Analysis of the experimental data by the mathematical model assuming that the KO differs from the WT strain in the maturation time of infected cells, t_m , or the number of merozoites produced, m . In both cases, the infectivity profile for both strains is defined by $\beta_0=4.8 \times 10^{-9} \text{ mZ}^{-1} \mu\text{l}^{-1} \text{ h}^{-1}$ and $\text{RF}=396.5$. (A) Profile likelihood analysis for different maturation times of infected cells. Best fits indicate a possible 1.5-fold longer maturation time for cells infected by the KO (green, $t_m=36\text{h}$) compared to the WT-parasite (blue, $t_m=24\text{h}$). (B) Model predictions show good agreement with the observed reticulocyte proportion and parasitemia dynamics. (C) & (D) Similar analysis for an assumed variation in the number of merozoites produced per infected cell. There is no indication for a difference between WT and KO found within the data. Such a model would lead impaired predictions of the observed dynamics for the KO-strain. In (B) and (D) black and grey dots indicate the mean and SD at measured time points for the reticulocyte proportion and the parasitemia (B).