

Supplemental Figure 3: Generation of $ASH4^{WT}$ -HA and $ASH4^{G2A}$ -HA rescue strains. **A)** Cartoon illustrating how the ASH4-HA alleles were introduced into the UPRT locus using strategy described in Supplemental Figure 2. Left gel shows PCR using primers to demonstrate integration of ASH4-HA rescue construct. Right gel shows PCR with primers for confirming construct integration into the UPRT locus. **B)** Graph depicts average plaque size of wild type (WT), $\Delta ash4$, $ASH4^{WT}$ -HA and $ASH4^{G2A}$ -HA parasites in mm² +/- SEM. Experiment was performed 3 independent times in technical triplicate. One way ANOVA was performed followed by Tukey's multiple comparison test to determine statistical significance, all statistically significant comparisons indicated, * indicates p value < 0.05.