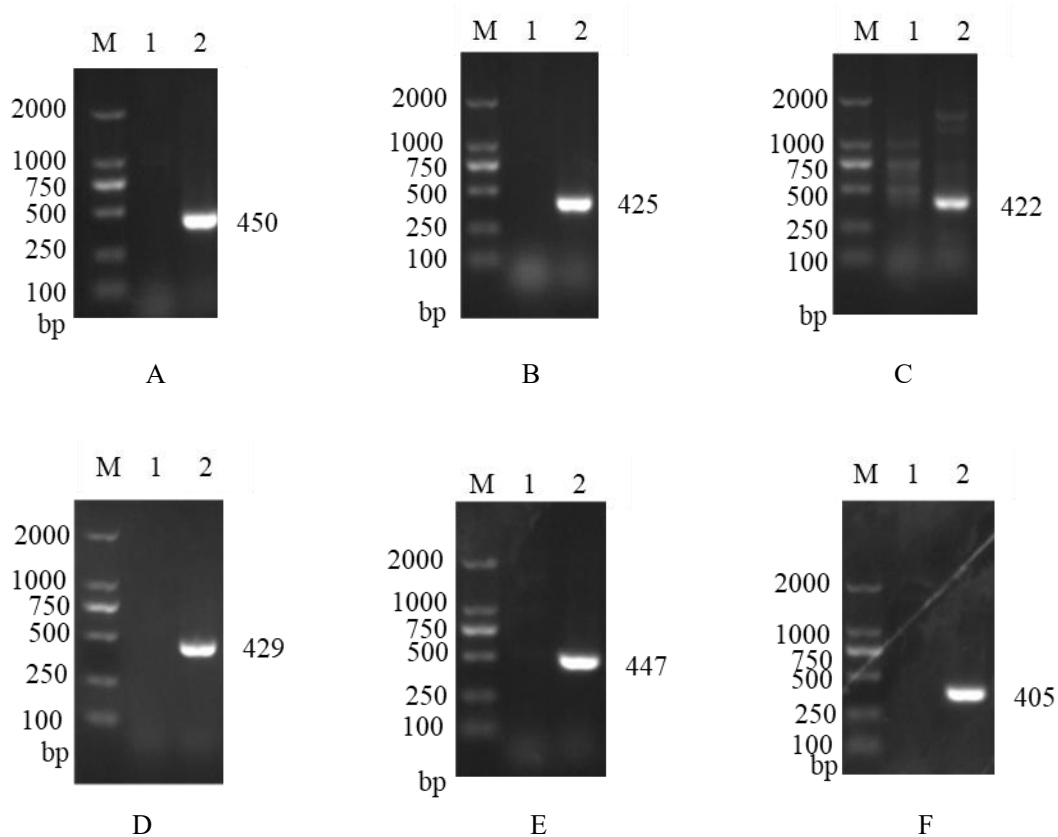


## Supplementary Material

### 2 Supplementary Figures



**Supplementary Figure 1.** PCR validation of *CAT*- and hypothetical protein (HP)-KO parasites.

M:DL2000 DNA Marker; 1:PCR product of target gene in deletion strain; 2: PCR product of target gene in RH strain

A) PCR validation of *CAT* gene deletion. B) PCR validation of *HP1* gene deletion. C) PCR validation of *HP2* gene deletion. D) PCR validation of *HP3* gene deletion. E) PCR validation of *HP4* gene deletion. F) PCR validation of *HP5* gene deletion.