



Figure S1. Schematic presentation of the pET3aHisTEVP-*zwf* vector used for the production of G6PD protein. pET3aHisTEVP-*zwf* vector carrying the *zwf* gene from *Helicobacter pylori* and regulated by a T7 promoter.



Figure S2. Structural alignment of HpG6PD model with HsG6PD. The structural alignment was performed using Chimera 1.14, the HpG6PD is shown in light brown, and HsG6PD in shown in green; the catalytic site is in red.

Multiple sequences alignment of G6PDs amino acids sequences. The sequences of G6PDs used for alignment were ALM79592.1 (*Helicobacter pylori*), WP_126241084.1 (*Campylobacter jejuni*), WP_098253162.1 (*Bacillus cereus*), WP_061933270.1 (*Gluconobacter japonicus*), 1DPG (*Leuconostoc mesenteroides*), 4LGV (*Mycobacterium avium*), WP_118792099.1 (*Neisseria bergeri*), WP_204813281.1 (*Neisseria elongate*), WP_024917865.1 (*Pseudomonas aeruginosa*), 6D23 (*Trypanosoma cruzi*), 6VA8 (*Homo sapiens*).