Inhibition of *Leishmania infantum* Trypanothione Reductase by New Aminopropanone Derivatives Interacting with the NADPH Binding Site

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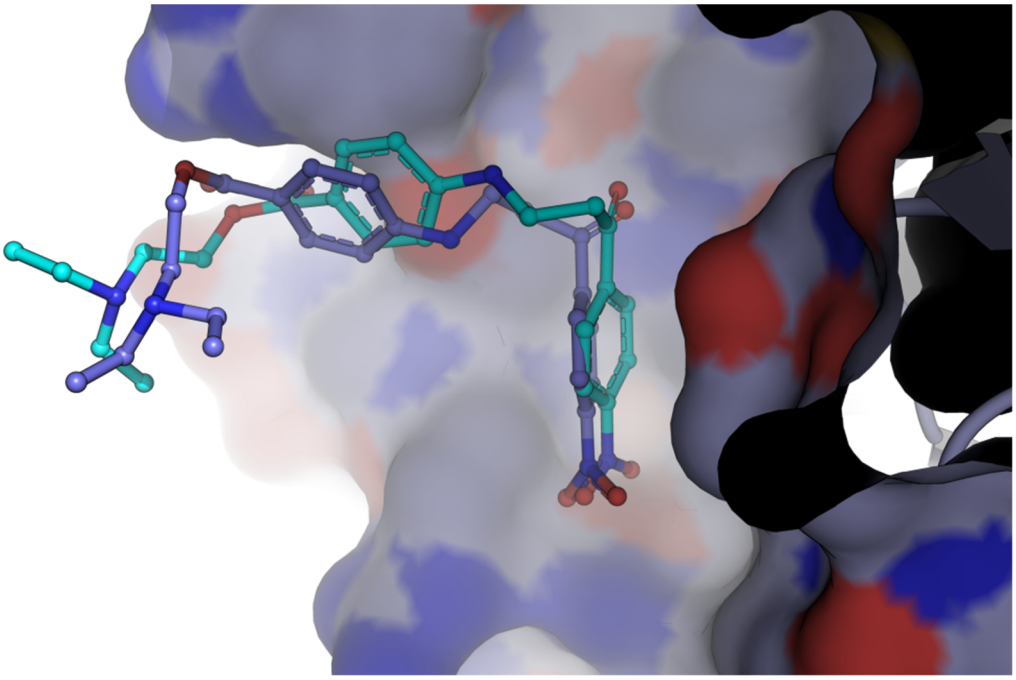

Figure S1: Superposition of crystal structure of compound **1** (medium blue) with the conformation generated by re-docking procedure for the same ligand (light blue).

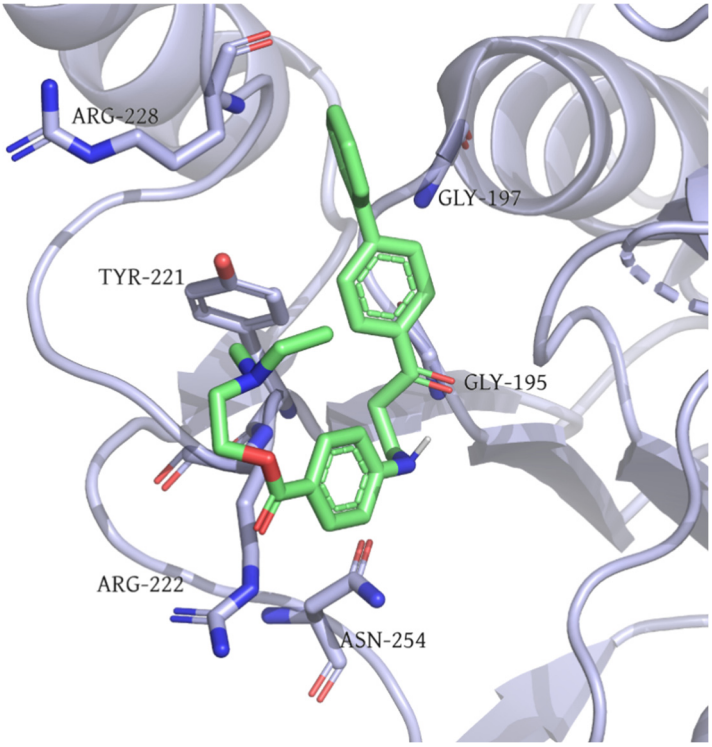

Figure S2: Conformation of compound **2a** with the lowest energy in the most populated cluster.

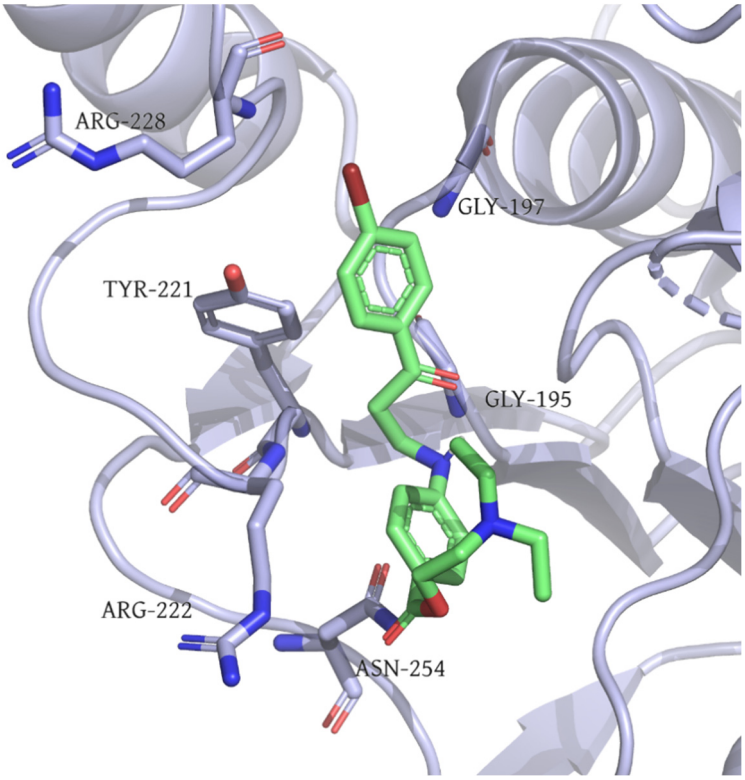

Figure S3: Conformation of compound **2c** with the lowest energy in the most populated cluster.

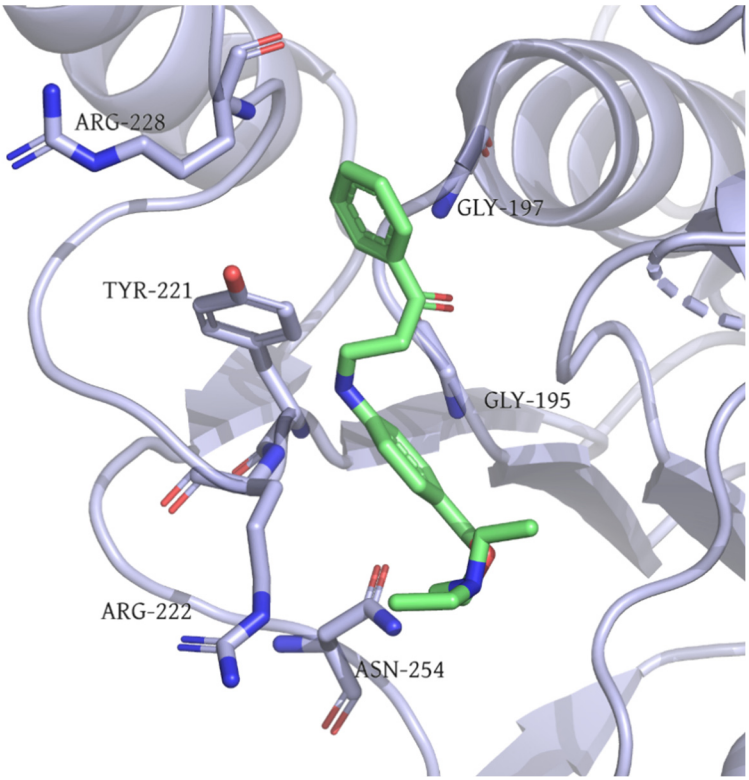

Figure S4: Conformation of compound **2d** with the lowest energy in the most populated cluster.

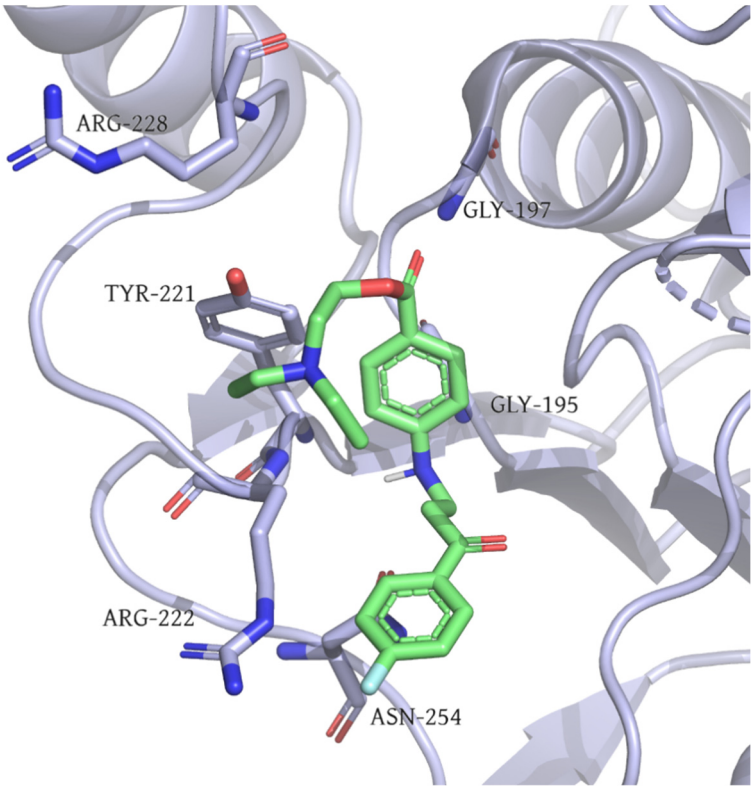

Figure S5: Conformation of compound **2e** with the lowest energy in the most populated cluster.

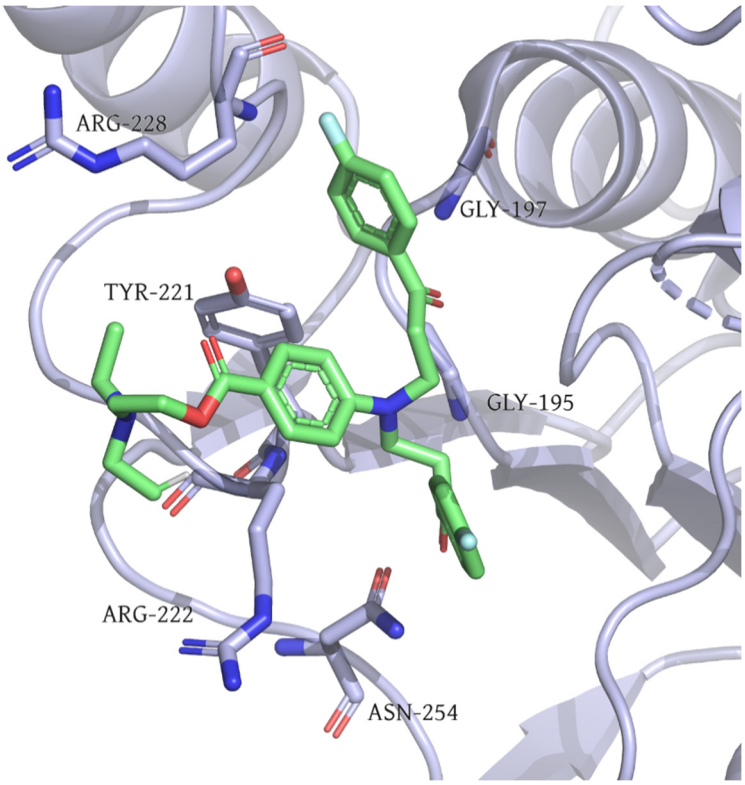

Figure S6: Conformation of compound **2f** with the lowest energy in the most populated cluster.

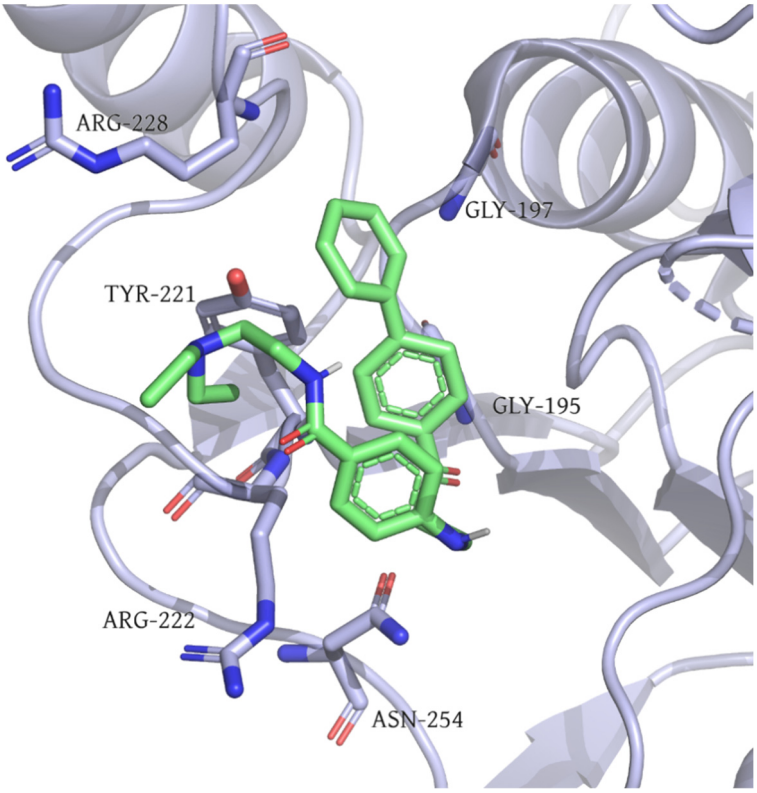

Figure S7: Conformation of compound **3a** with the lowest energy in the most populated cluster.

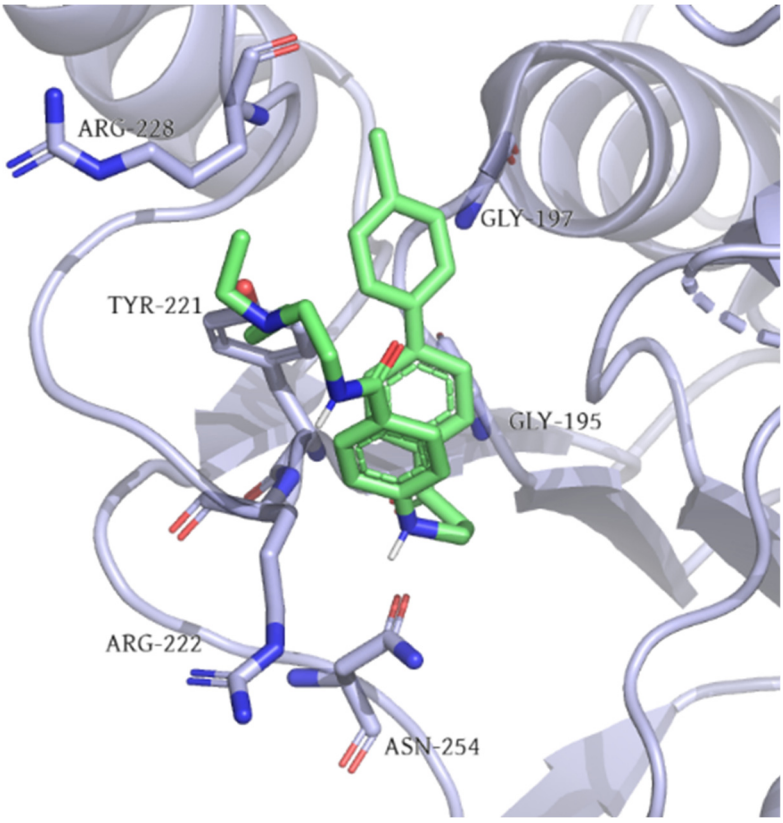

Figure S8: Conformation of compound **3b** with the lowest energy in the most populated cluster.

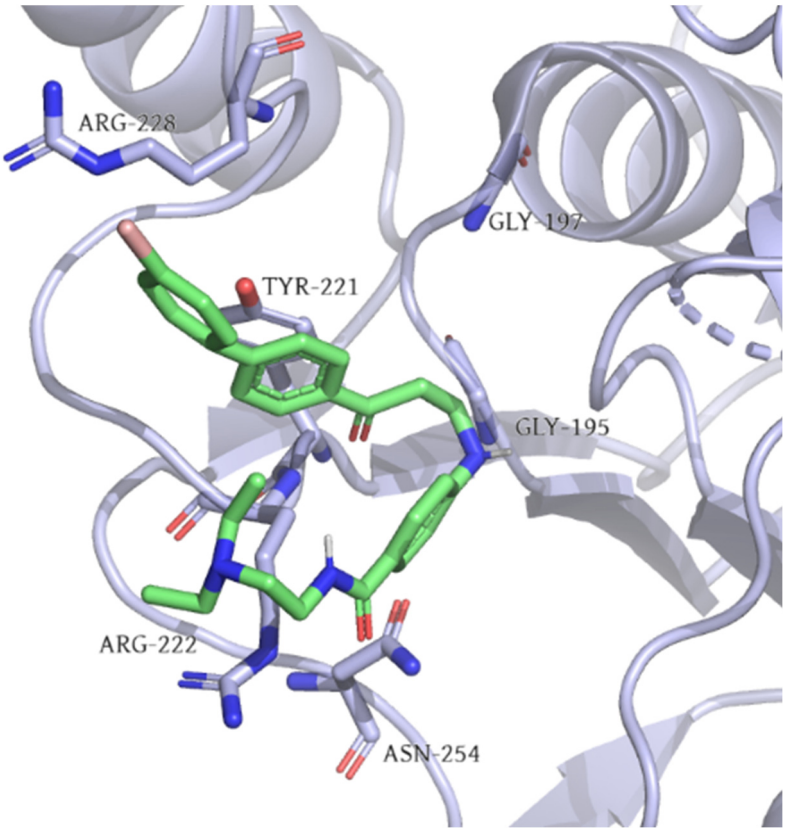

Figure S9: Conformation of compound **3c** with the lowest energy in the most populated cluster.

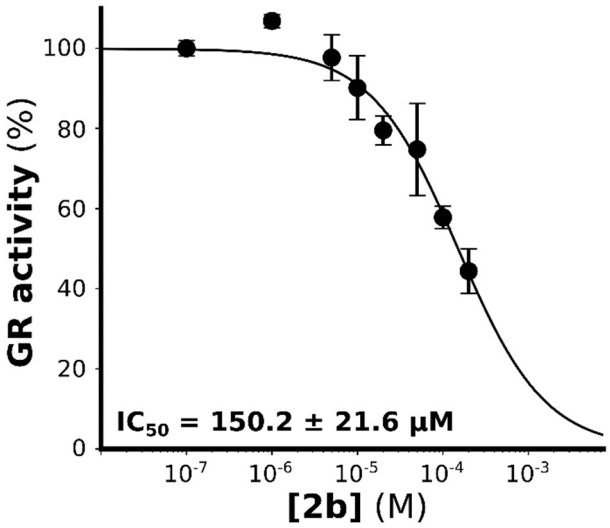

Figure S10. Inhibition kinetics of the glutathione reductase in the presence of compound 2b. Inhibition assays were performed at 25 °C using a JASCO V650 spectrophotometer equipped with a JASCO EHC-716 Peltier unit. Glutathione Reductase (GR) 50 nM, (purchased from Sigma Aldrich) was mixed with varying concentrations of compound 2b (0.1 to 200 µM) and 150 µM oxidized glutathione in 50 mM HEPES pH 7.4, 40 mM NaCl; and incubated at 25°C for 3 minutes. The reaction was started upon addition of 100 µM NADPH. Oxidation of NADPH was followed as a decrease in absorbance at 340 nm. GR activity was determined as V0(compound)/V0(control)*100 where V0 is the initial velocity. The IC50 was determined using a dose response logistic equation defined by the Kaleidagraph software as ymin+(ymax-ymin)/(1+(x/IC50)^slope).