

Supplemental Information:

Active site differences between substrate-free and ritonavir-bound cytochrome P450 (CYP) 3A5 reveal plasticity differences between CYP3A5 and CYP3A4

Mei-Hui Hsu and Eric F. Johnson*

From the Department of Molecular Medicine, Scripps Research
La Jolla, CA 92037

*To whom correspondence should be addressed: Eric F. Johnson, Department of Molecular Medicine, Scripps Research, 10550 North Torrey Pines Drive, La Jolla, CA 92037 USA; johnson@scripps.edu; Tel: 858-784-7918

Supplement Figure S1:

Page 2: Figure S1A rendered for wall-eyed stereo viewing

Page 3: Figure S1B rendered for cross-eyed stereo viewing

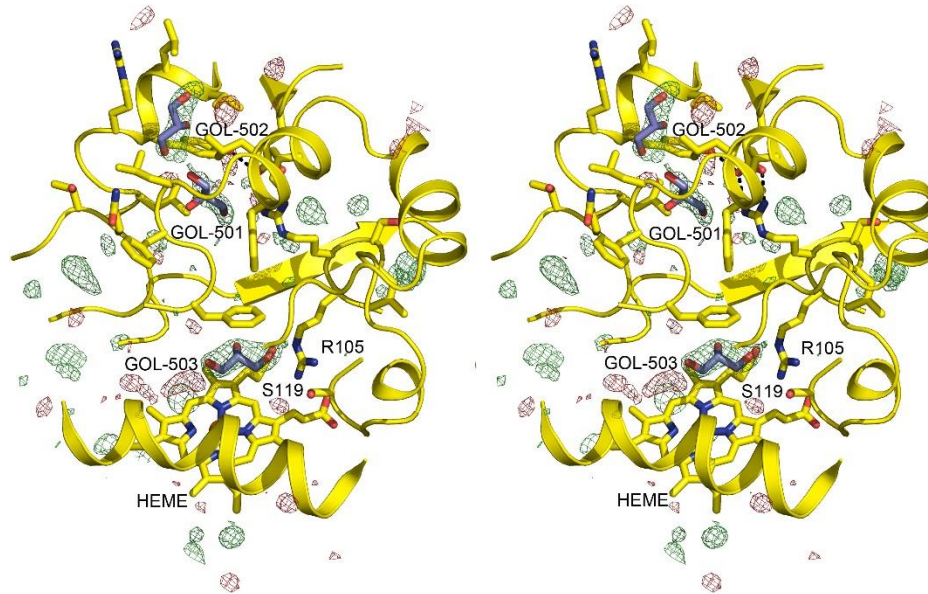


Figure S1A. A wall-eyed stereo view of the active site with glycerol (GOL) molecules. The mesh surfaces depict an mFo-DFc glycerol omit difference map contoured at 3.25σ (green mesh) and -3.25σ (red mesh) providing positive evidence for the presence of the glycerol molecules without evidence for other ligands. GOL-501 and GOL-502 are bound in the open entrance channel, whereas GOL-503 resides on the surface of heme. Although, there is a potential for hydrogen bonding interactions of GOL-503 with either Arg-105 or Ser-119, the distances are slightly greater than 3.5 Å. Glycerol is present in the crystallization drop at 10% v/v. The simple omit map was generated by Phenix 1.13 and imaged using Pymol.

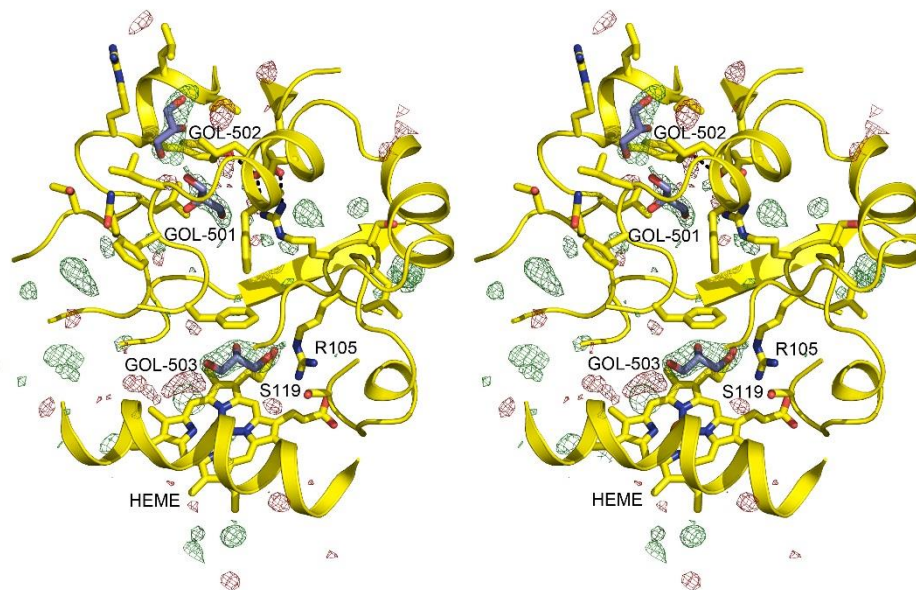


Figure S1B. A cross-eyed stereo view of the active site with glycerol (GOL) molecules. The mesh surfaces depict an mFo-DFc glycerol omit difference map contoured at 3.25σ (green mesh) and -3.25σ (red mesh) providing positive evidence for the presence of the glycerol molecules without evidence for other ligands. GOL-501 and GOL-502 are bound in the open entrance channel, whereas GOL-503 resides on the surface of heme. Although, there is a potential for hydrogen bonding interactions of GOL-503 with either Arg-105 or Ser-119, the distances are slightly greater than 3.5 \AA . Glycerol is present in the crystallization drop at 10% v/v. The simple omit map was generated by Phenix 1.13 and imaged using Pymol.