



Fig. S2: Rv0078 purified from *E. coli* binds fatty acids. (A) GS-MS of fatty acids extracted from *E. coli*-expressed and purified Rv0078. Each identified fatty acid peak is labeled by the total number of carbon followed by the number of unsaturated C-C bond. I.S.: internal standard. UN: unknown peak. (B) A quantification of the relative amount of fatty acids bound to Rv0078. (C) A palmitate fits the 2Fo-Fc density map in the ligand binding pocket. The density is contoured at 1σ in blue mesh. (D) The structure of Rv0078 bound to a fatty acid. Protein is shown in rainbow cartoon, and the ligand in spheres. Only one monomer of the dimer is shown. (E) Except for an H bond with Glu-70, the palmitate is surrounded by hydrophobic residues of the ligand-binding pocket. This panel was generated with the program Ligplot+ (Laskowski R A, Swindells M B (2011) *J. Chem. Inf. Model.*, 51, 2778-2786).