

Supporting Information

The *Mycobacterium tuberculosis* Mycothiol S-transferase enzyme binds mycothiol in a divalent metal-dependent manner

Yahani P. Jayasinghe¹, Michael T. Banco², Jared J. Lindenberger², Lorenza Favrot², Zuzana Palčková³, Mary Jackson³, Shino Manabe^{4,5}, Donald R. Ronning^{1*}

¹Department of Pharmaceutical Sciences, College of Pharmacy, University of Nebraska Medical Center, Omaha, Nebraska, United States, 68198-6025.

²Department of Chemistry and Biochemistry, University of Toledo, Toledo, Ohio, United States.

³Mycobacteria Research Laboratories, Department of Microbiology, Immunology and Pathology, Colorado State University, Fort Collins, Colorado 80523-1682, United States.

⁴Laboratory of Functional Molecule Chemistry, Pharmaceutical Department and Institute of Medicinal Chemistry, Hoshi University, Tokyo, Japan.

⁵Research Center for Pharmaceutical Development, Graduate School of Pharmaceutical Sciences & Faculty of Pharmaceutical Sciences, Tohoku University, Miyagi, Japan.

*Corresponding author

Catalytic Metal	Mean V ($\mu\text{M}/\text{min}$)
Zn ²⁺	0.65 \pm 0.02
Co ²⁺	2.73 \pm 0.06
Fe ²⁺	0.59 \pm 0.01

Table S1 – catalytic rates of MST catalyzed reactions with different metals in the reaction mixture





