

DevS, a Heme-Containing Two-Component Oxygen Sensor of *Mycobacterium tuberculosis*[†]

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FIGURE LEGENDS

FIGURE S1: Safe stain (left figure) and in gel His tag stain (right figure) of DevS642 25330 Da. Lane 1. SeeBlue Plus 2 standard 7 μ L; Lane 2, tenfold dilution of whole cell sample BL21DE3 expressing DevS642 induced at 0.4 mM IPTG concentration; Lane 3, tenfold dilution of whole cell sample Rosetta 2 expressing DevS642 induced at 0.4 mM IPTG concentration; Lane 4, tenfold dilution of whole cell sample DH5 α expressing DevS642 induced at 0.4 mM IPTG concentration; Lane 5, tenfold dilution of whole cell sample BL21DE3 expressing both DevS642 and GroEL/ES induced at 1 mM IPTG concentration; Lane 6, tenfold dilution of whole cell sample DH5 α expressing both DevS642 and GroEL/ES induced at 1 mM IPTG concentration.

FIGURE S2: Expression of DevS642: Safe stain (left figure) and in gel His tag stain (right figure). Lane 1, tenfold dilution of whole cell sample expressing DevS642 induced at 1 mM IPTG concentration; Lane 2, tenfold dilution of whole cells expressing both DevS642 and GroEL/ES induced at 1 mM IPTG concentration; Lane 3, 20 fold dilution of whole cell sample expressing DevS642 induced at 1 mM IPTG concentration; Lane 4, 20-fold dilution of whole cells expressing both DevS642 and GroEL/ES induced at 1 mM IPTG concentration; Last lane, SeeBlue Plus 2 standard 7 μ L.

FIGURE S3. UV-visible spectra of: wt-DevS642 Fe^{2+} -NO, Fe^{3+} -NO, and Fe^{2+} -O₂ complexes (A) and H149A DevS642 Fe^{2+} -NO and Fe^{3+} -NO complexes (B).

FIGURE S4. UV-visible spectra of: wt-DevS full length: ferric, ferrous, and Fe^{2+} -CO complexes.

FIGURE S5. Panel 1: High frequency RR of ferric wt full length DevS (A), wt DevS642 (B), wt DevS642 parallel (C) and perpendicular (D) polarization. **Panel 2:** High frequency RR of ferrous wt full length DevS (A), wt DevS642 (B), wt DevS642 parallel (C) and perpendicular (D) polarization

FIGURE S6. Low-frequency RR of ferrous wt DevS642 (A) and full length DevS (B) at room temperature ($\lambda_{\text{exc}} = 442$ nm; 15 mW).

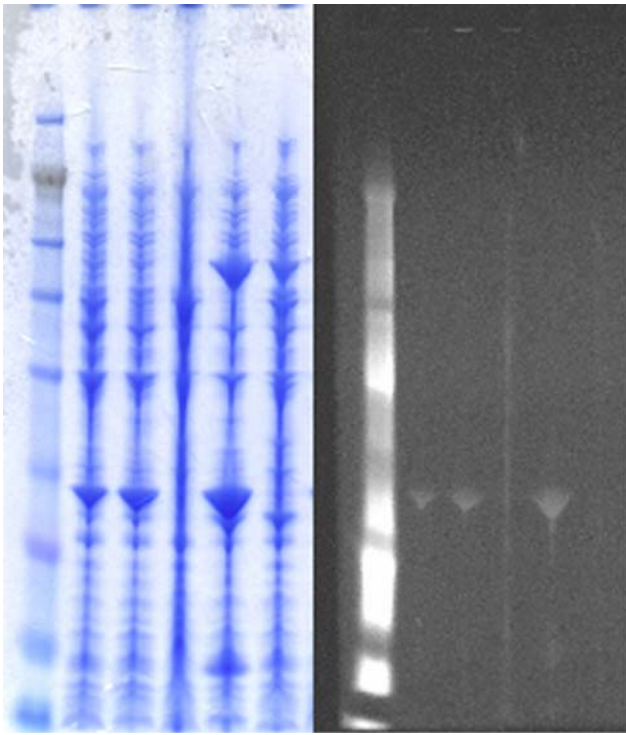


Figure S1

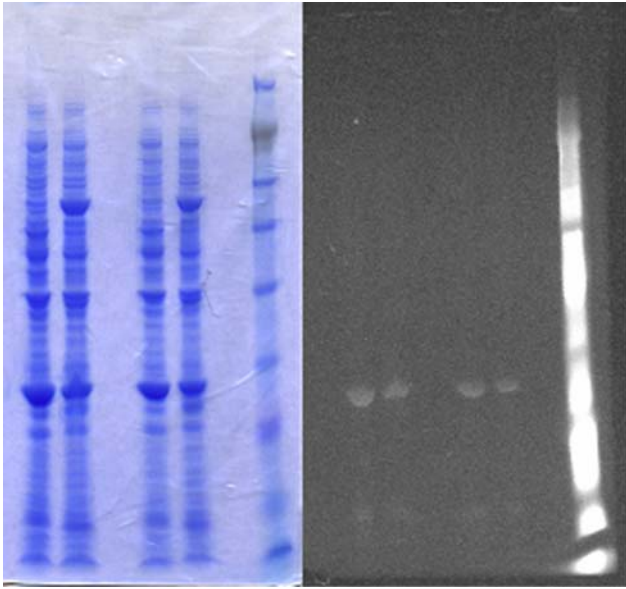


Figure S2

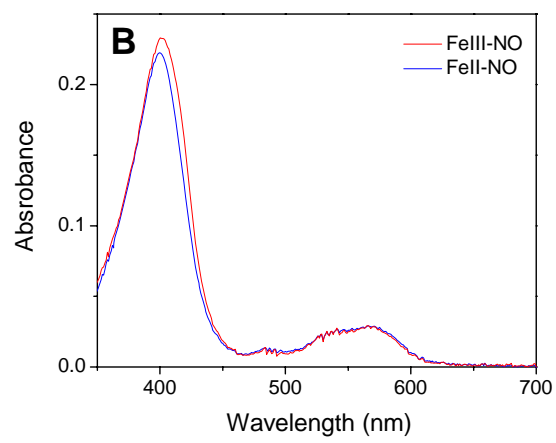
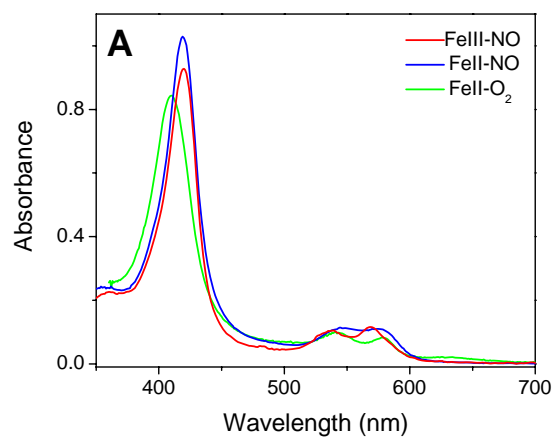


Figure S3

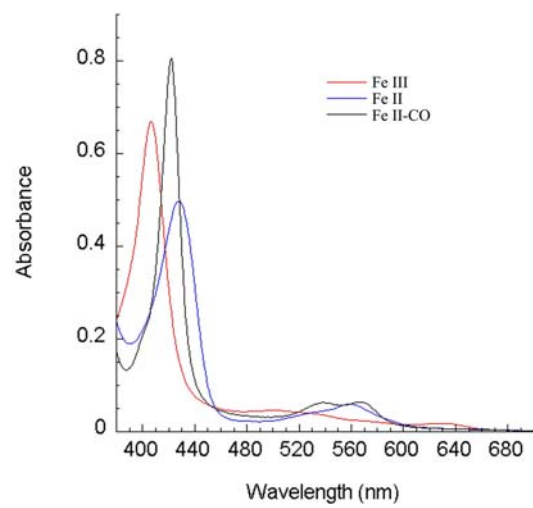


FIGURE S4

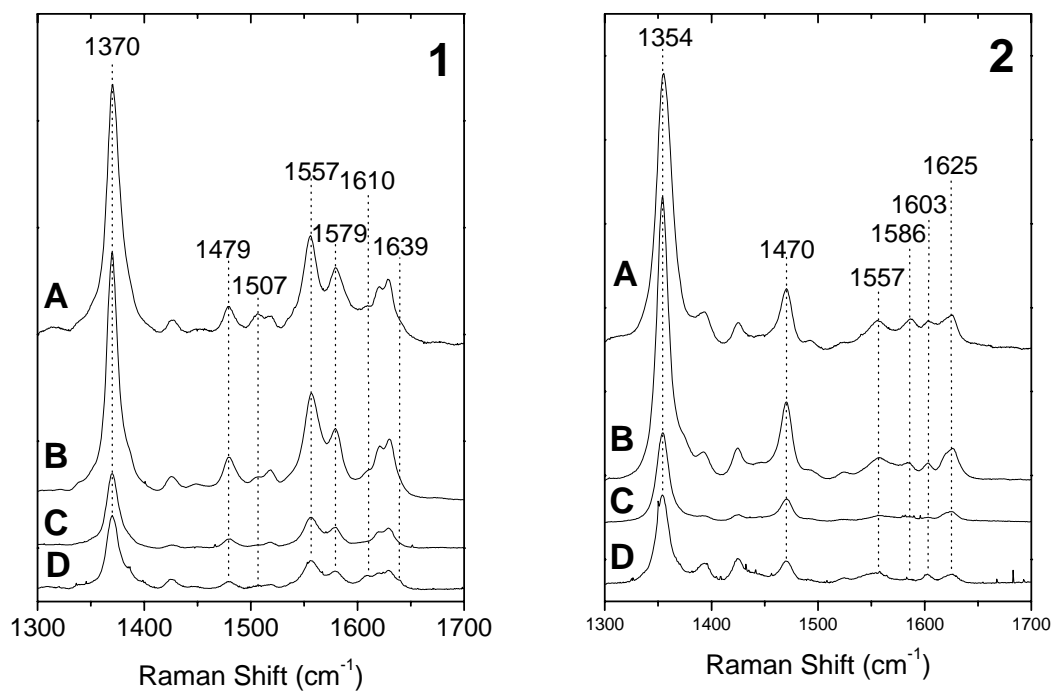


FIGURE S5

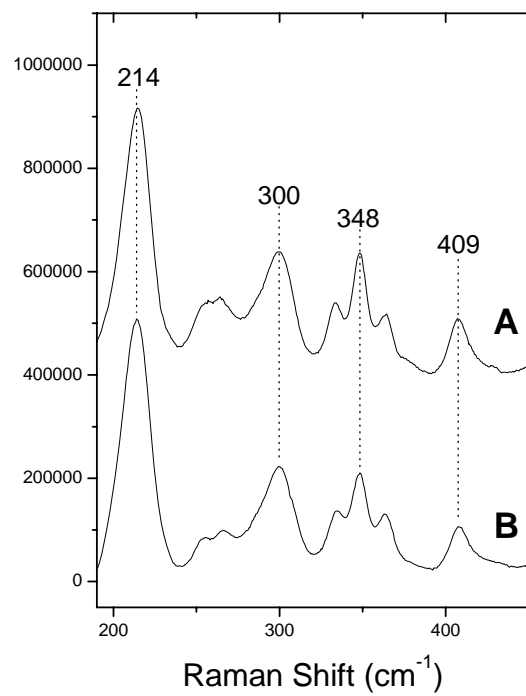


FIGURE S6