

Figure S1. Energy dispersive x-ray spectrographs of samples of *Metallosphaera sedula* that were cultured heterotrophically on yeast extract at pH 1.5 (A), mixotrophically on yeast extract amended with 20 mM soluble iron at pH 1.5 (B), and mixotrophically on yeast extract amended with 40 mM soluble iron at pH 3.5 (C). Elements: C, carbon; Cu, copper; Fe, iron; and S, sulfur.

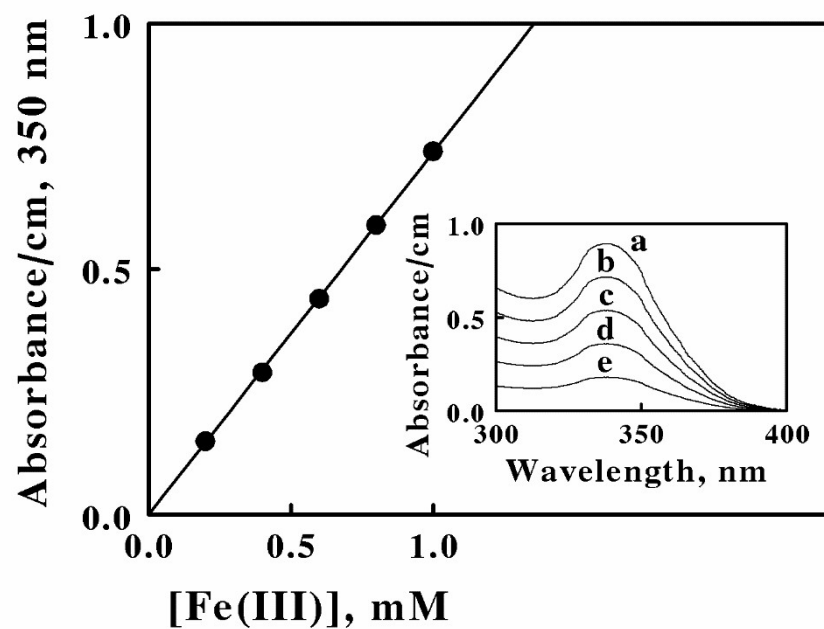


Figure S2. Dependence of the absorbance at 350 nm on the concentration of ferric sulfate at pH 1.5. *Inset*, absorbance spectra of ferric sulfate at pH 1.5; ferric concentrations: 0.2, 0.4, 0.6, 0.8, and 1.0 mM in curves *a* through *e*, respectively.