

Supplementary Material

**Structure and mechanism of Cu- and Ni-substituted analogs of metallo- β -
lactamase L1**

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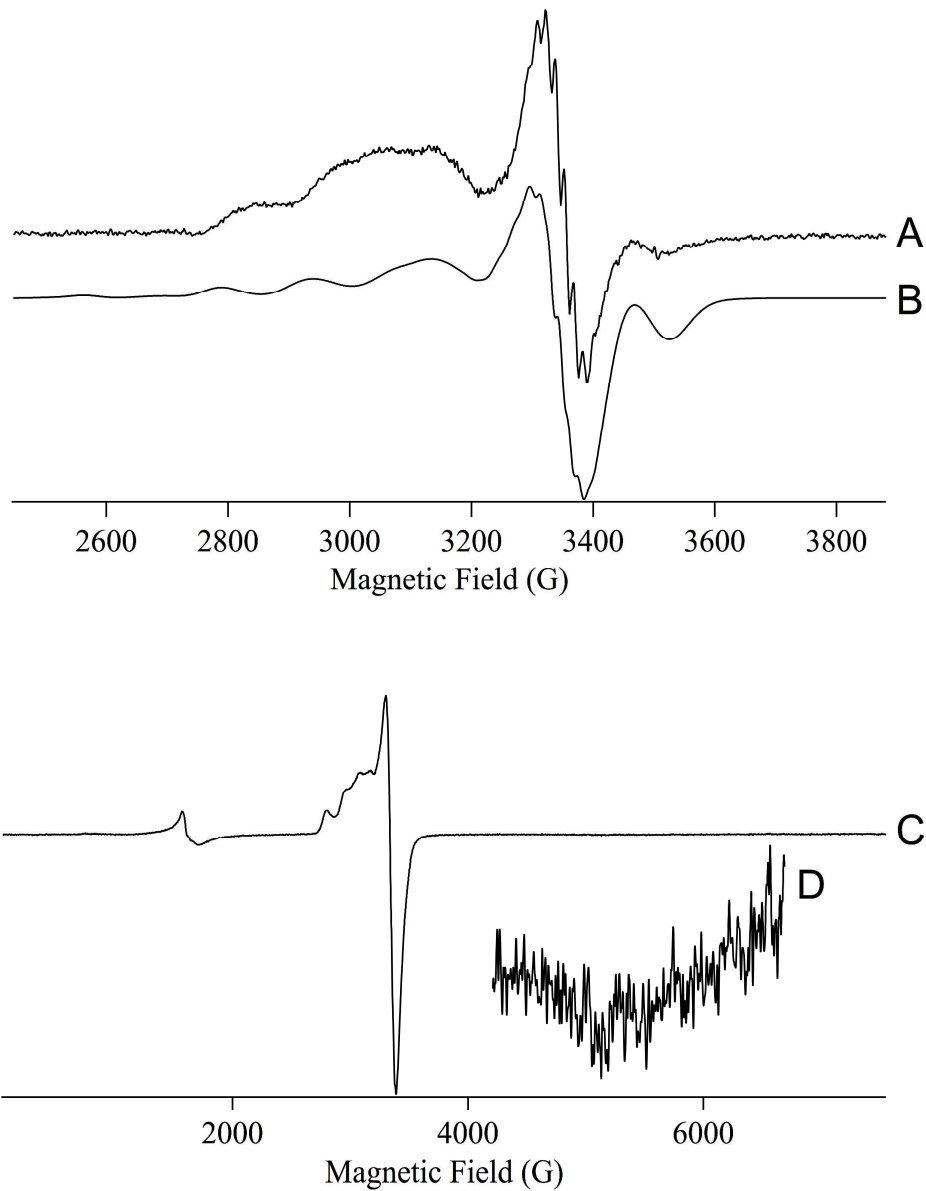


Figure S1. EPR spectra of Cu-L1. (A) difference spectrum generated by subtraction of the spectrum from Cu-L1 recorded at 0.1 mW, 10 K, from that recorded at 2 mW, 10 K. (B) Computer simulation assuming two Cu(II) ions with $g_{\parallel} = 2.284$, $A_{\parallel}(\text{Cu}) = 15.5 \times 10^{-3} \text{ cm}^{-1}$, $g_{\perp} = 2.055$, $A_{\perp}(\text{Cu}) = 1.10 \times 10^{-3} \text{ cm}^{-1}$, and a Cu-Cu distance of 5 Å. The contribution of ^{14}N

superhyperfine was neglected in the simulation. (C) Experimental spectrum of Cu-L1 recorded at 2 mW, 10 K. (D) Expanded view of high-field region.