

Table S1. Thermodynamic parameters for copper binding to buffers and holo-amicyanin possessing 6×His tag

	0.25 M ammonium acetate buffer	6×His-tagged amicyanin in 0.25 M ammonium acetate
<i>N</i> (site)	0.8 ± 174.0	0.1 ± 1.3
<i>K_D</i> (μM)	570 ± 8260	36 ± 26
Δ <i>H</i> (kJ/mol)	-335 ± 7900	-335 ± 4360
Δ <i>G</i> (kJ/mol)	-18.5	-25.4

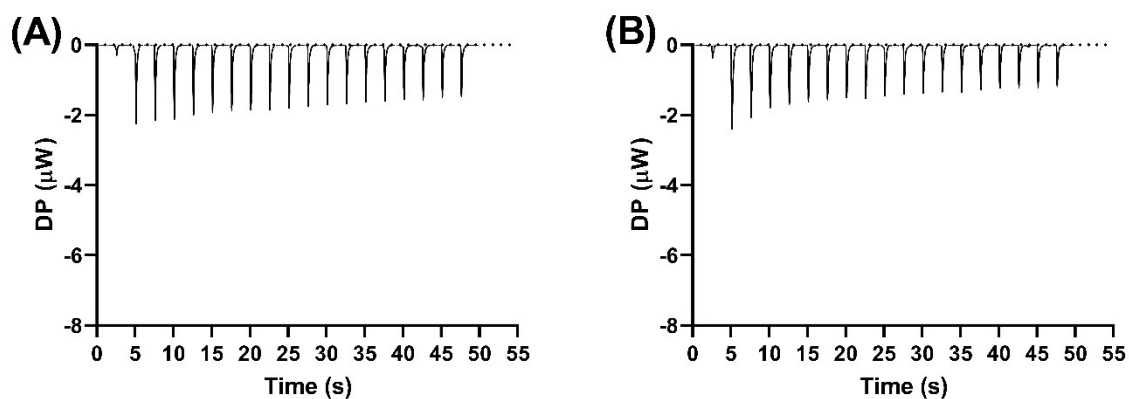


Figure S1. Thermodynamic analysis following the addition of copper to the buffers and holo-amicyanin possessing 6×His tag. (A) Isothermal calorimetry (ITC) curves measured at 25°C for copper added to 0.25 M ammonium acetate buffer (pH 8.0) are shown. Heat compensation in the reaction cell containing amicyanins as a function of time was best fitted by a single binding site model. (B) ITC curves measured at 25°C for copper added to 12 μ M holo-amicyanin in 0.25 M ammonium acetate buffer (pH 8.0) are shown. Heat compensation in the reaction cell containing amicyanins as a function of time was best fitted by a single binding site model.