Intramolecular Electron Transfer in the Bacterial Two-Domain Multicopper Oxidase mgLAC

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Supporting Information

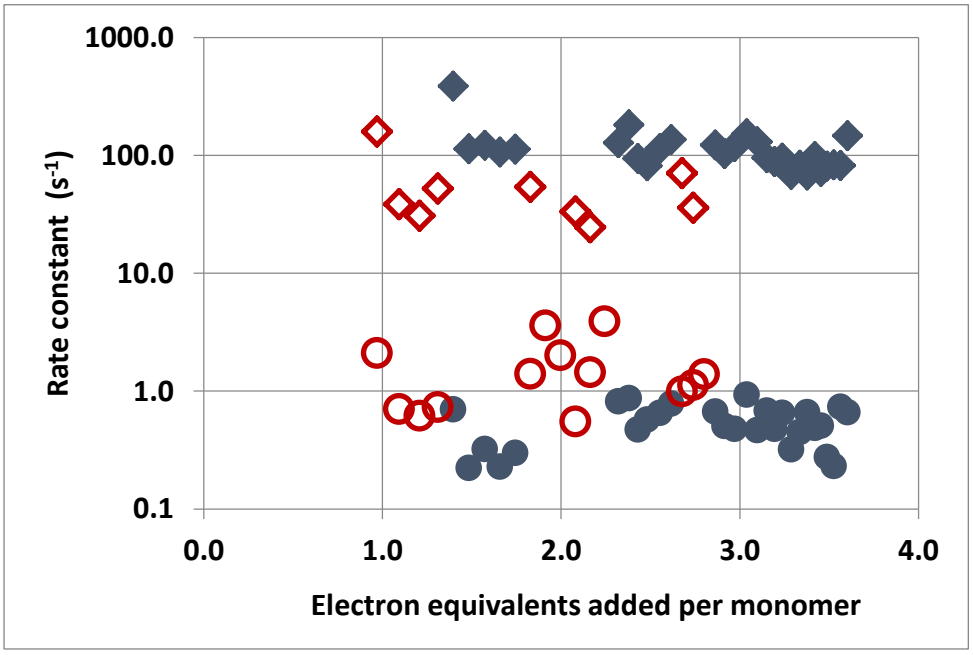

Figure S1A. Intramolecular ET rate constants plotted as function of the number of electron equivalents taken-up by the protein. The red points are rate constants for the two intramolecular T1[Cu(I)] reoxidation processes (Eq. 4 in the main text) as measured at 605 nm. The blue points represent intramolecular ET to the T3 Cu(II) pair as measured at 330 nm. Temperature 298 K and pH 9.1.

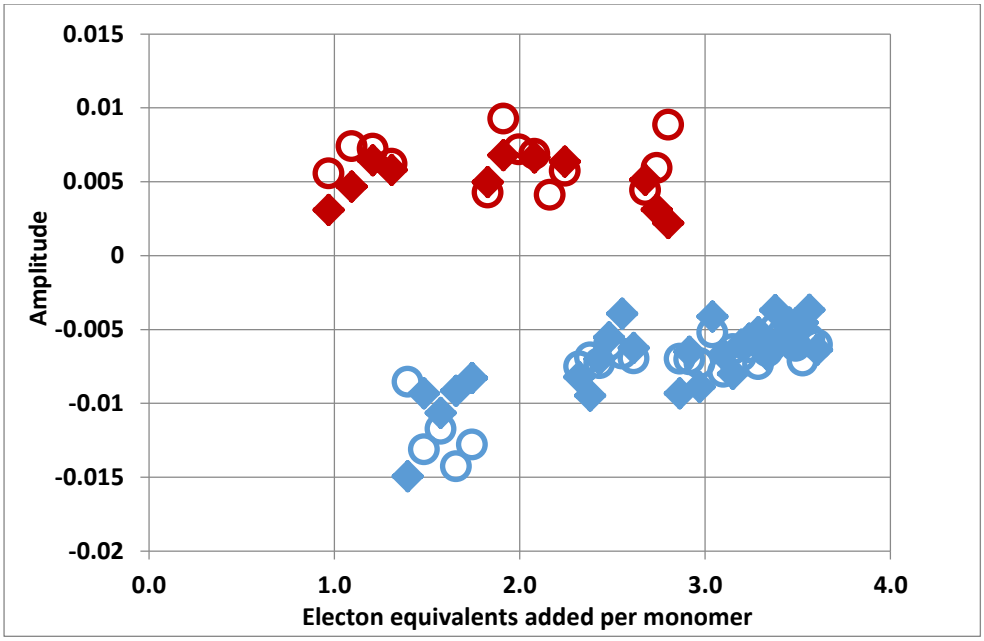

Figure S1B. Dependence of the intramolecular ET reaction's amplitudes (absorbance units) on the number of electron equivalents taken-up by the protein, monitored at 605 nm (blue points) and 330 nm (red points) during the fast and slow intramolecular ET for the same experiment as described in Fig. S1A. Notice that negative numbers are due to increasing absorbance (oxidation), positive to decreasing absorbance (reduction)

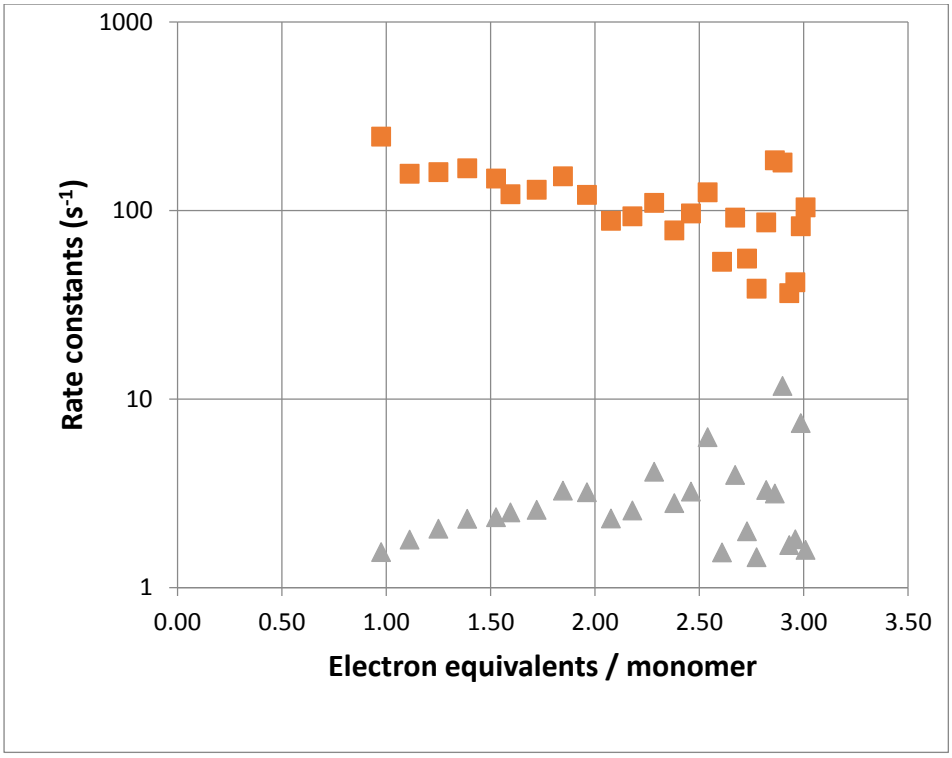

Figure S2A Rate constants of reoxidation of T1[Cu(I)] plotted as a function of the number of electron equivalents taken-up by the enzyme, process (*3*) in the main text. The rate constants are less precisely defined towards the end of the reductive titration as their amplitudes become rather small. Temperature 298 K, pH 7.5, 100 mM sodium formate, 29.7 μM mgLAC.

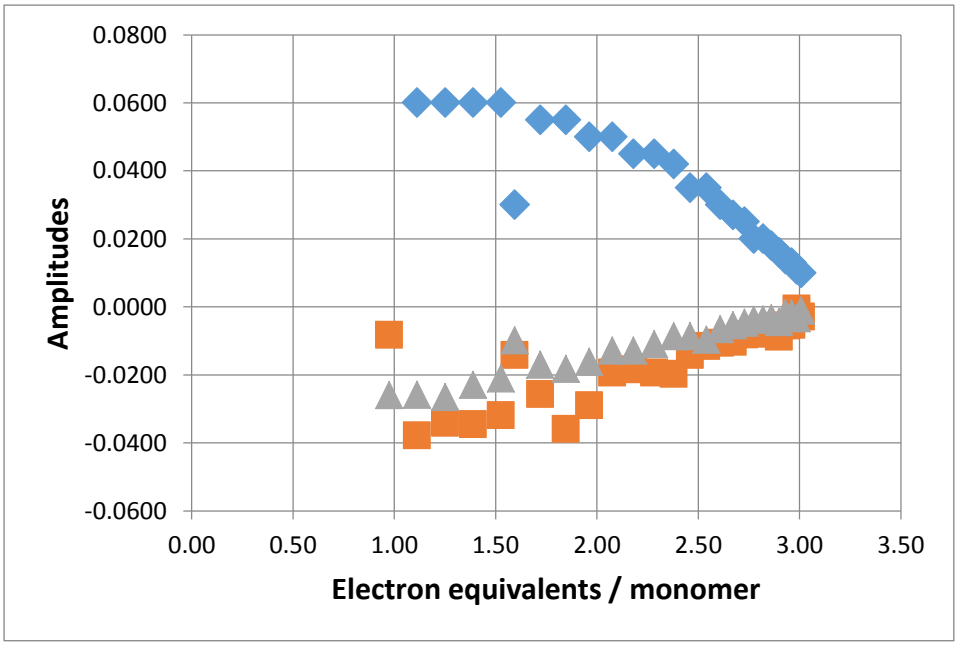

Figure S2B Intramolecular ET reaction amplitudes (absorbance units) for the same experiment depicted in Fig. S2A. The blue points present the reduction of T1[Cu(II)] and the green and red points are the two intramolecular T1[Cu(I)] reoxidation processes (Eq. 4 in the main text).