

Supporting Document

Macromolecular Crowders and Osmolytes Modulate the Structural and Catalytic Properties of Alkaline Molten Globular 5-Aminolevulinate Synthase

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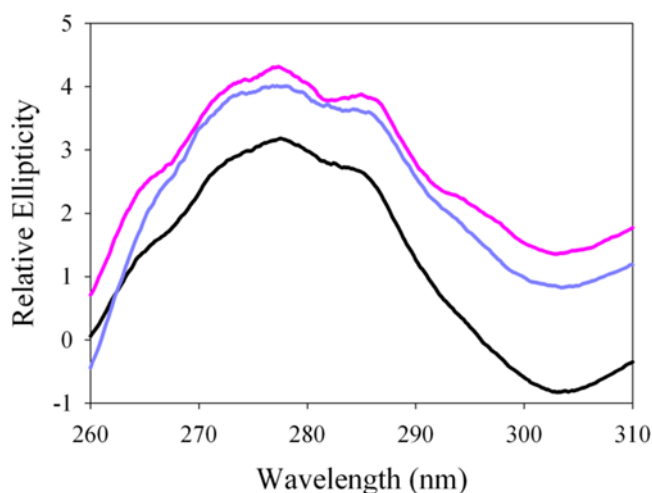


Figure S1. Near-UV CD measurements of mALAS2 at pH 9.5 and in the presence of 20% (w/v) TMAO (purple) or glycerol (pink). The spectrum at pH 7.5 and in the absence of cosolvents is shown as a black trace. Note that the spectra at pH 9.5 start at a higher elliptical value due to alkaline-induced modifications in the PLP microenvironment. All measurements were done at 37 °C using 1 mg/mL protein.

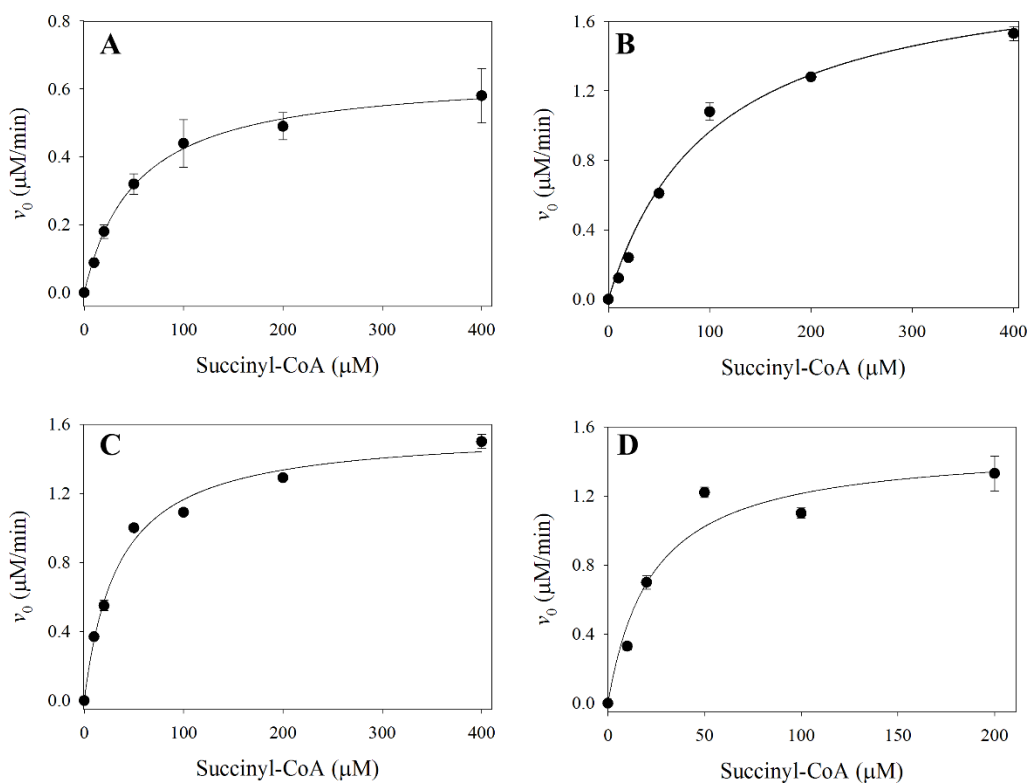


Figure S2. Primary plots constructed from the initial velocities of the mALAS2^{alk} catalyzed reaction between glycine and succinyl-CoA (pH 9.5 and 37 °C) in the presence of (A) 20% TMAO, (B) 20% glycerol, (C) 20% Ficoll 400, and (D) 20% Dextran 200 fitted into the Michaelis-Menten equation. All reactions were performed in duplicates and the error bars are obscured by the symbols.