

Supporting Information

S224 presents a catalytic trade-off in PLP-dependent L-lanthionine synthase from

Fusobacterium nucleatum

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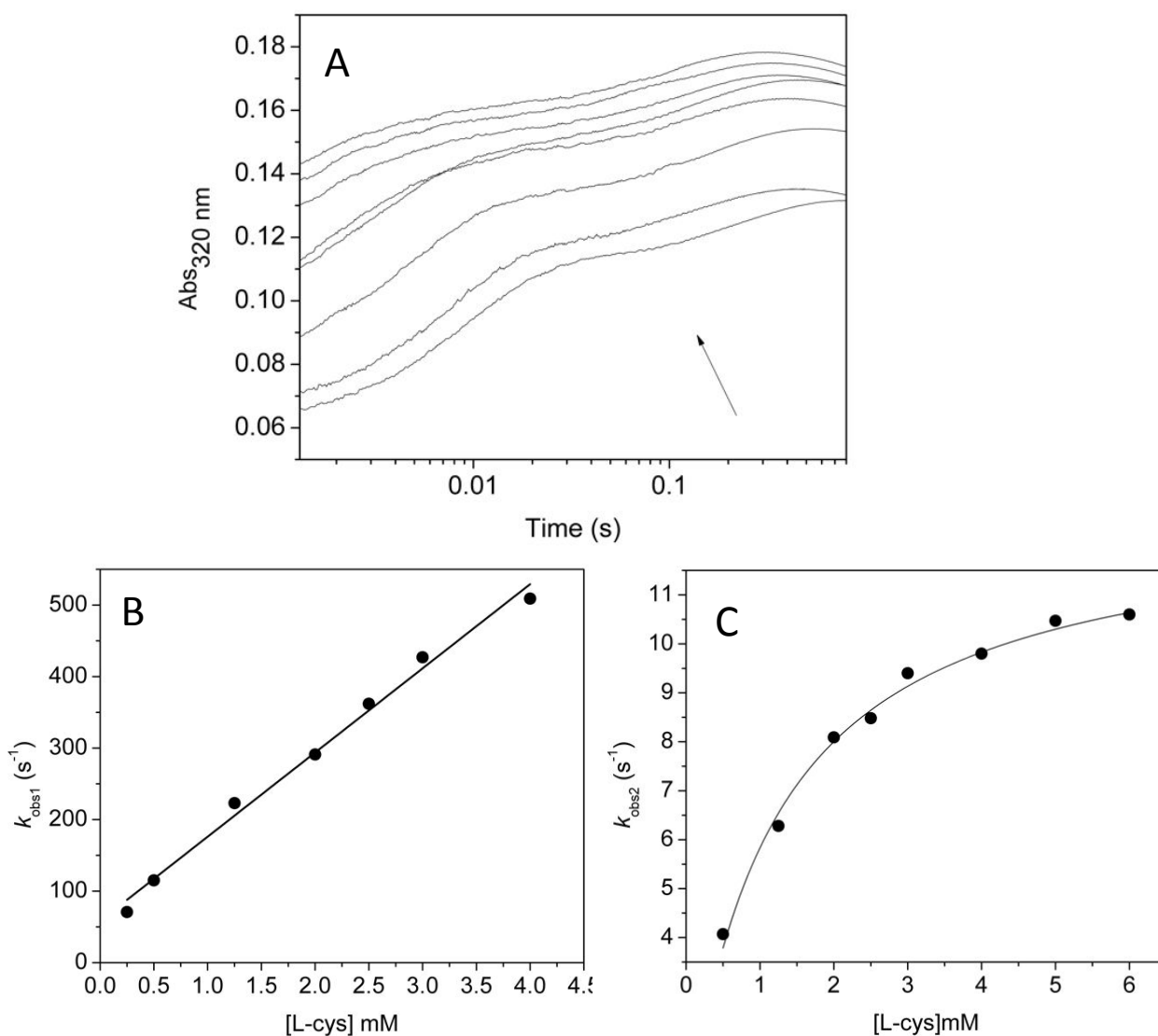


Figure S1. Reaction between 50 μM wild type LS and L-cysteine (0.5 – 12 mM). (A) Biphasic absorbance traces collected at 320 nm at increasing concentrations of L-cysteine. The arrow denotes the direction of the absorbance traces at increasing concentrations of L-cysteine. (B) The linear dependence of k_{obs1} on L-cysteine concentration. The slope of the line gave bimolecular rate constants of $118 \pm 5 \text{ mM}^{-1} \text{ s}^{-1}$. (C) The hyperbolic dependence of k_{obs2} on L-cysteine

concentrations. A fit of equation 1 gave a K_d of 1.2 ± 0.1 mM for L-cysteine and k_{lim} of 12.8 ± 0.3 s⁻¹.