

Supplementary material of A Novel Assay for Phosphoserine Phosphatase Exploiting Serine Acetyltransferase as the Coupling Enzyme

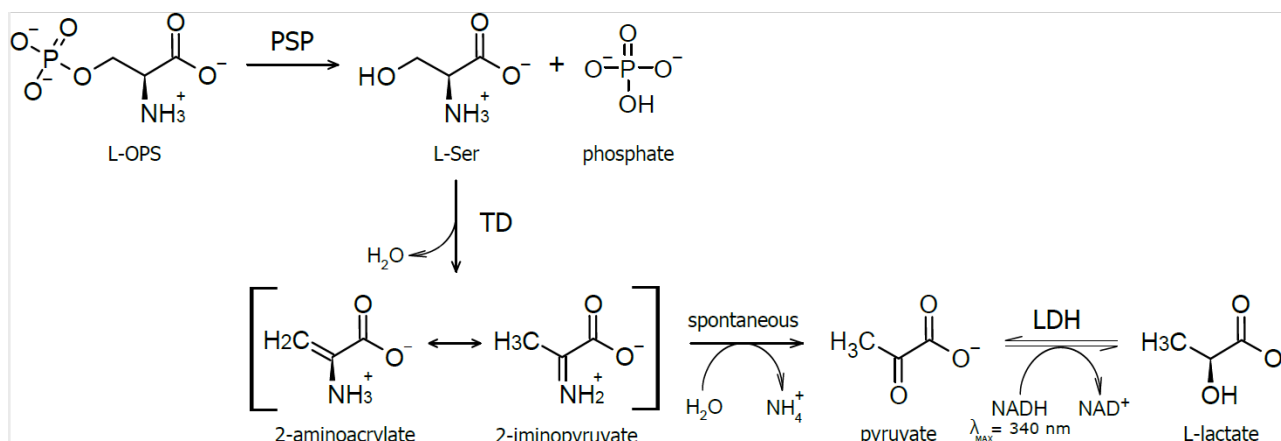


Figure S1. Scheme of the mechanism of the serine/threonine deaminase (TD)-coupled continuous assay.

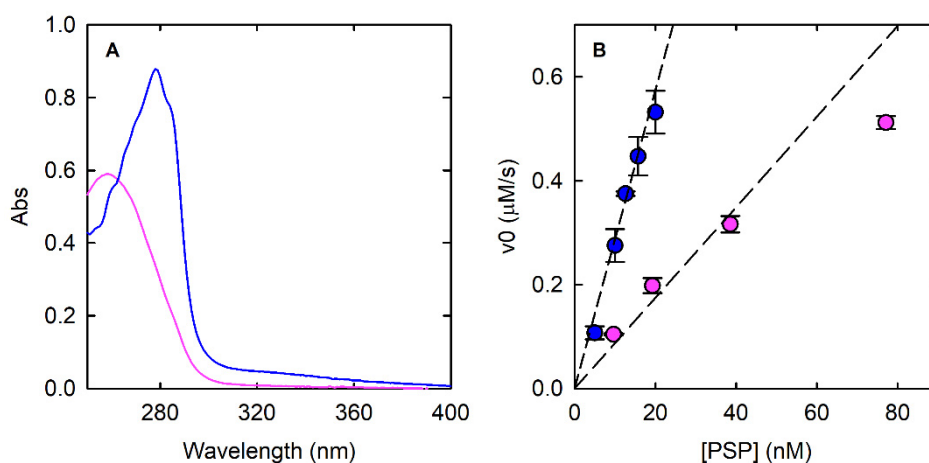


Figure S2. (A) Absorption spectra of PNP before (purple) and after (blue) dialysis. (B) Dependence of the initial velocity of the phosphatase reaction on PSP concentration in the presence of saturating concentrations of L-OPS (0.3–0.5 mM). PNP was dissolved in buffer T and used either before (purple dots) or after (blue dots) extensive dialysis against the same buffer. The concentration of PNP used was 0.5 μM (purple dots) and 3 μM (blue dots). As mentioned in the results section, the use of higher concentrations of undialyzed PNP does not increase the rate of PSP reaction.

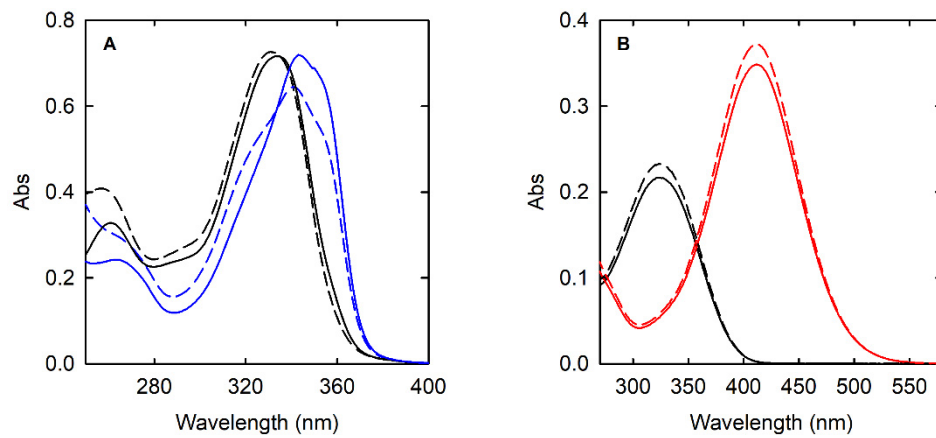


Figure S3. (A) Absorption spectra of MESG before (black) and after (blue) the addition of PNP (end point) at pH 7.0 (continuous lines) and pH 7.6 (dashed lines). (B) Absorption spectra of DTNB before (black) and after (red) the addition of 1 mM DTT at pH 7.0 (continuous lines) and pH 7.6 (dashed lines).

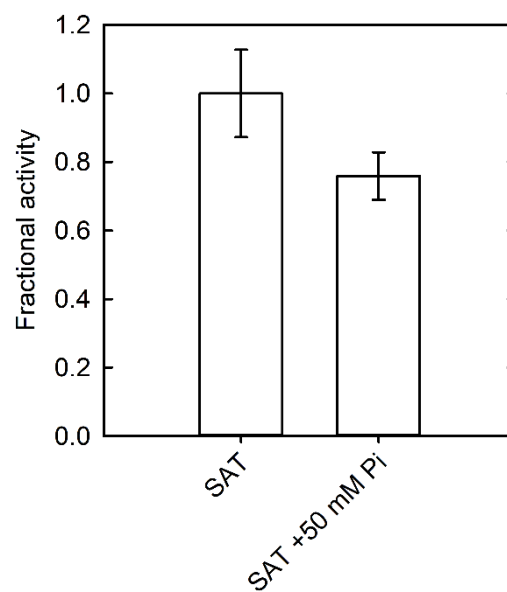


Figure S4. Effect of 50 mM phosphate in buffer H on SAT activity (4 nM SAT) in the presence of 1 mM L-Ser.