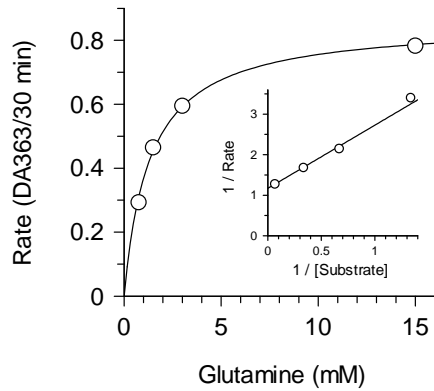**Supplemental Figure S2.** Enzyme kinetic characterization of *E. coli*-expressed AtGPRAT2 and inhibition by DAS734. GPRAT activity was followed by measuring the PRPP-dependent production of glutamate with a glutamate dehydrogenase-coupled assay after heat-quenching of the reaction. Data were fitted to the appropriate kinetic equations using Grafit Software (Erithacus Software, UK). A, Km determination for glutamine. The PRPP concentration was held constant at 2.5 mM. The data were fitted to the Michaelis-Menten equation yielding a Km for glutamine of 1.34 mM. B, Effect of increasing concentrations of DAS734 on GPRAT activity. Reactions were performed at concentrations of DAS734 as indicated above the curves (µM) and 2.5 mM PRPP. Curves were fitted to a noncompetitive inhibition equation yielding an apparent Ki for DAS734 of 22 µM and a Km for glutamine of 1.5 mM.

A

B