



Supplemental Figure 3. Steady-state enzyme kinetics of purified recombinant SOMT1 (A), SOMT2 (B) and SOMT3 (C) using various substrate concentrations. Assays were carried out for 1 (SOMT1) to 4 hours (SOMT2 and SOMT3) with 5-50 μg protein. Activity was based on the radioactivity recovered in an organic solvent phase extraction from aqueous enzyme assays. Kinetic parameters were determined by varying alkaloid concentrations from 1 to 500 μM at a fixed concentration of 200 μM SAM under optimal temperature and buffer conditions. The kinetic data for SAM were obtained by varying the SAM concentration between 1 to 200 μM at a constant alkaloid concentration of 100 μM . Kinetic constants were determined by fitting initial velocity versus substrate concentration to the Michaelis-Menten equation. Each point represent the mean specific activity \pm standard deviation monitored as a function of substrate concentration for three independent replicates.