

Screening of acetyl donor and robust enzymatic synthesis of acetyl-CoA by 10-deacetylbaecatin III-10- β -O-acetyltransferase

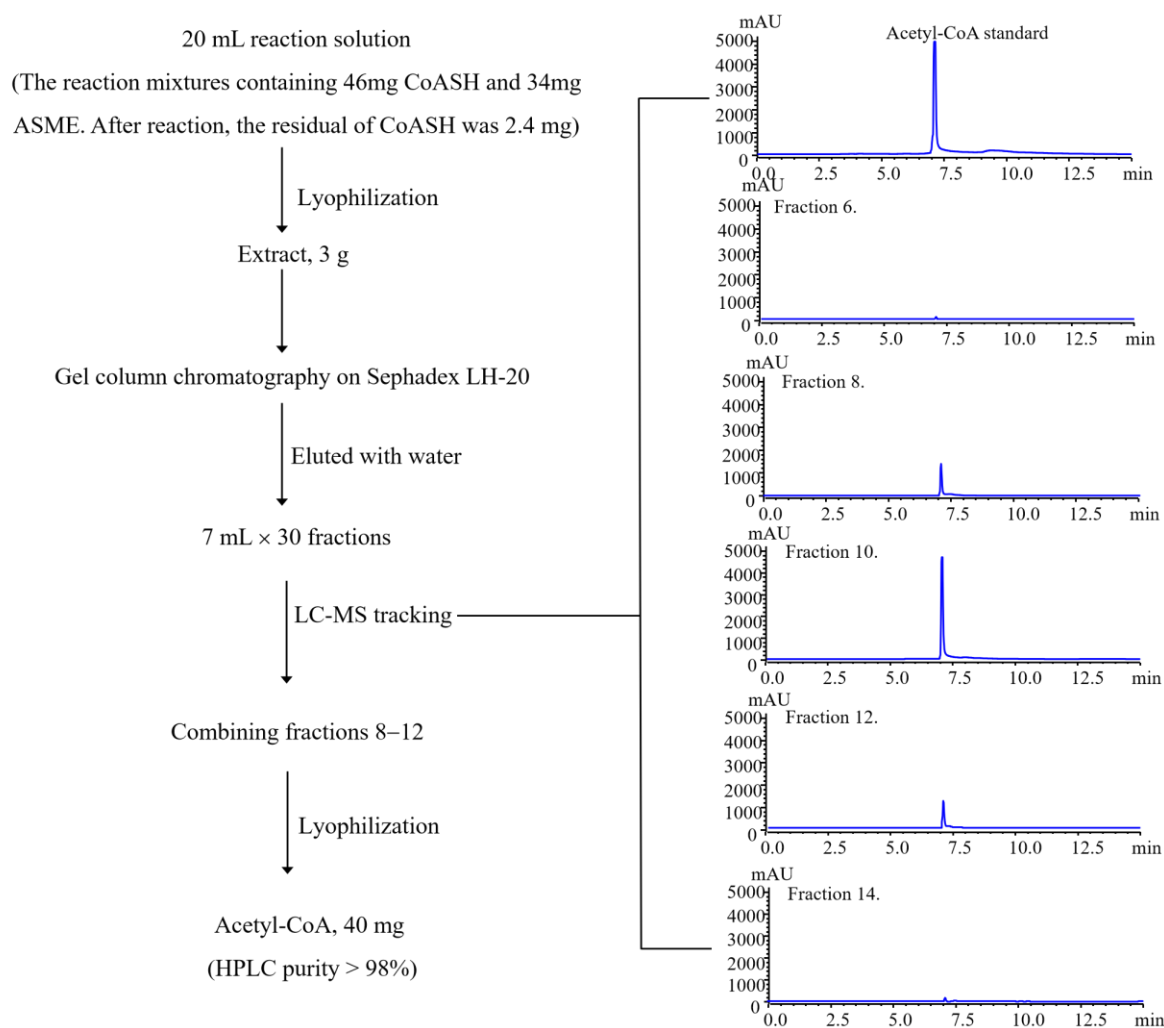


Figure S1. Flow chart of acetyl-CoA purification.

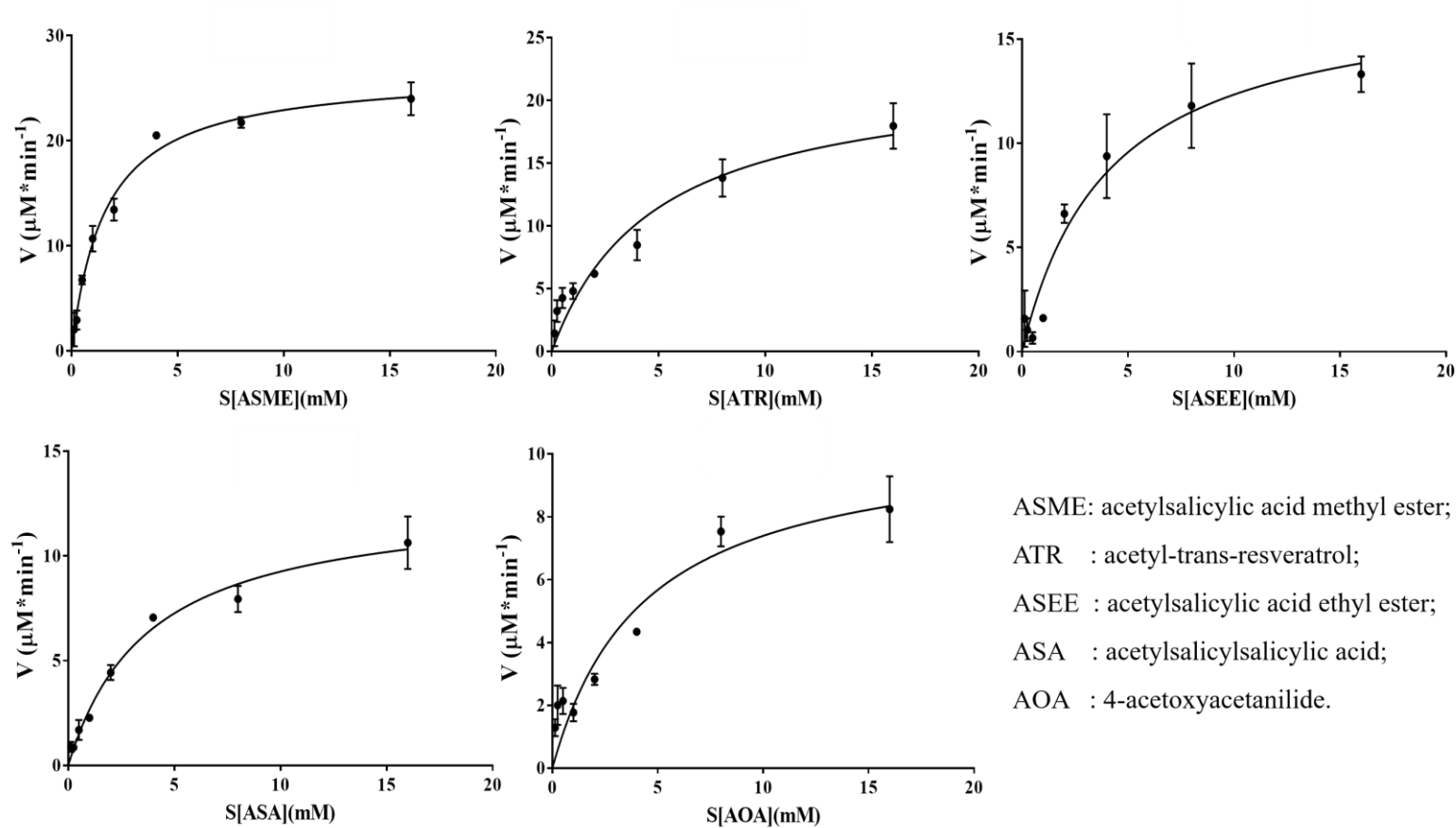


Figure S2. Substrate-velocity curves for kinetic parameters of DBAT against five acetyl donors.

The kinetic parameters were determined against ATR, ASME, ASA, ASEE, AOA. The reaction mixtures containing 100 mM Tris-HCl buffer (pH 7.0), an acetyl donor in a range of 0.0125 mM, 0.25 mM, 0.5 mM, 1 mM, 2 mM, 4 mM, 8 mM, and 16 mM, 0.1 mg/mL DBAT, 1 mM CoASH, 1.7 mM KH_2PO_4 , and 7.2 mM $\text{K}_2\text{HPO}_4 \cdot 3\text{H}_2\text{O}$ in a final volume of 200 μL were incubated at 37 °C for 0.5 h. The reactions were terminated by adding 300 μL methanol. The kinetic data were processed via a proportional weighted fit using a nonlinear regression analysis program based on Michaelis–Menten enzyme kinetics.

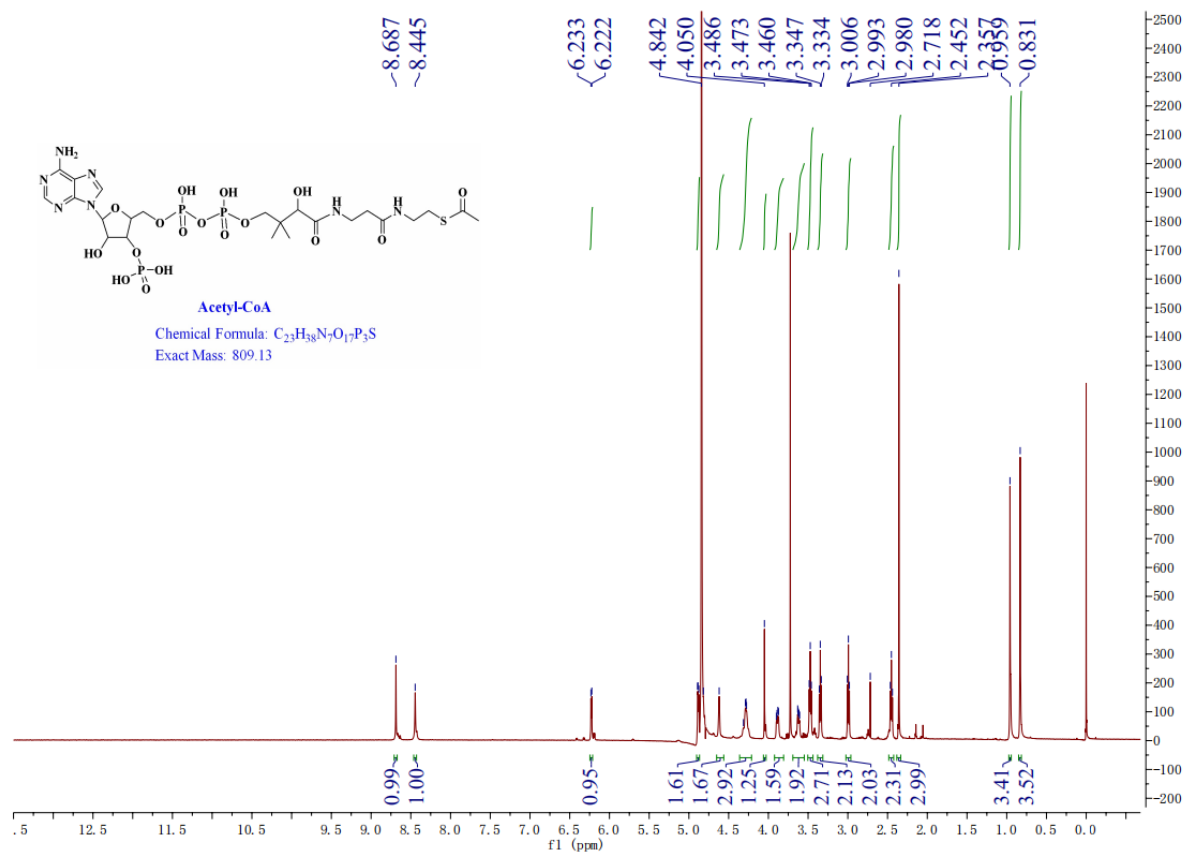


Figure S3. The 1H -NMR spectrum of acetyl-CoA.

