Isolation of Two New Compounds as an Inhibitor of ACAT from *Mylabris phalerate* Pallas

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Ethyl acetate extracts of *Mylabris phalerate* showed significant ACAT (Acyl-coenzyme A: cholesterol acyltransferase, EC.2.3.1.26) inhibitory activity. Activity-guided fractionation of the ethyl acetate extracts led to the isolation of new compounds using silica-gel column chromatography, preparative TLC, and HPLC. EI-mass spectrometry gave molecular mass of 281 and 279, respectively. NMR spectra identified its as octadec-5-enoic acid amide and octadeca-5,8-dienoic acid amide. Octadec-5-enoic acid amide exhibited inhibitory activity of rat liver ACAT (IC50 =162 μM), hACAT1 (IC50 = 85 μM) and hACAT2 (IC50 = 61 μM). Octadeca-5,8-dienoic acid amide inhibited rat liver ACAT activity (IC50 =150 μM), hACAT1 activity (IC50 = 72 μM) and hACAT2 activity (IC50 = 54 μM).