

Six New Chalcones from *Angelica keiskei* Inducing Adiponectin Production in 3T3-L1 Adipocytes

(明日葉由来の6種の新規カルコンは3T3-L1脂肪細胞におけるアディポネクチン産生を誘導する)

*Angelica keiskei* (Ashitaba in Japanese), a traditional herb in Japan, contains abundant prenylated chalcones. It has been reported that the chalcones from *A. keiskei* showed such bioactivities as anti-bacterial, anti-cancer and anti-diabetic effects. Xanthoangelol, 4-hydroxyderricin and six new chalcones were isolated in this study from an ethanol extract of *A. keiskei* by octadecyl silyl (ODS) and silica gel chromatography, and identified by 1D- and 2D-nuclear magnetic resonance (NMR) and high-resolution mass spectrometric analyses. The chalcones from *A. keiskei* markedly increased the expression of the adiponectin gene and the production of adiponectin in 3T3-L1 adipocytes. These results suggest that the chalcones from *A. keiskei* might be useful for preventing the metabolic syndrome.