

A New Tissue Factor Inhibitory Triterpene from the Fruit of *Chaenomeles sinensis*

Ming Hong Lee^{1*} and Yong Nam Han²

^{1,2}Natural Products Research Institute, ²College of Pharmacy, Seoul National University,
Seoul 110-460, Korea

Tissue factor (TF, tissue thromboplastin or coagulation factor III) accelerates the blood clotting, activating both the intrinsic and the extrinsic pathways to serve as a cofactor. In order to isolate TF inhibitor from the fruit of *Chaenomeles sinensis*, an activity-guided purification was carried out to yield two triterpene saponins. One compound was new and the structure was elucidated as 28-O- β -D-glucopyranosyl 2,3-dihydroxy-olean-12-en-24,28-dioic acid ester (**2**) by means of spectral analysis and chemical conversion. The other compound is trachelosperoside A-1 (**1**). Compound **2** and its aglycone prolonged 50% the prothrombin time at the concentrations of 7.7 and 4.2 μ g / 100 μ l plasma / one TF unit, respectively. Compound **1** was inactive and was also isolated for the first time from the this plant.

Key words

Chaenomeles sinensis (Rosaceae), 28-O- β -D-glucopyranosyl- 2,3-dihydroxy-olean-12-en-24,28-dioic acid ester, tissue factor inhibitor