분류번호	I-P-1

Antiplatelet Effect of AC7-1 isolated from *Ardisia crispa*

Byung Hoon Han, Young-Hwa Kang, Dae-Yeon Suh and Man Ki Park*
Natural Products Research Institute, S.N.U.
*College of Pharmacy, S.N.U.

In the screening of tropical medicinal plants using PAF receptor binding assay, the ether extract of *Ardisia crispa* showed the potent antagonistic activity. *Ardisia crispa* have been used to heal the scurf, earache, orchitis, fever and diarrhoea, cough and given to the mother after childbirth to 'wash out dirty blood' in Malaysia. By means of activity guided isolation, compound AC7-1 was isolated as the potent PAF antagonist. In this study, antiplatelet effects of compound AC7-1 were examined *in vitro* platelet aggregation assay using the chronolog aggregometer. Compound AC7-1 inhibited PAF-, collagen-, ADP-, thrombin-induced platelet aggregation in human, rabbit and rat platelet rich plasma. In vitro rabbit platelet aggregation, the IC_{50} value of compound AC7-1 was 5×10^{-6} M against PAF(5×10^{-7}M)-induced aggregation. The IC_{50} values of AC7-1 on PAF-induced platelet aggregation increased with increase of the concentration of PAF used. This result suggested the competitive nature of the AC7-1 antagonism. In vitro rat platelet aggregation, the IC_{50} values of AC7-1 on collagen-, ADP-induced platelet aggregation were 4×10^{-6} M, 2×10^{-5} M, respectively. Also in vitro human platelet aggregation, AC7-1 potently inhibited both the primary phase and secondary phase of thrombin-induced aggregation.