

## Inhibition by Pinusolide of Platelet-Activating Factor (PAF-acether)-Induced Hypotension and Bronchoconstriction.

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It has been known that pinusolide isolated from *Biota orientalis* inhibits specifically [<sup>3</sup>H]PAF binding to and PAF-induced aggregation of rabbit platelets *in vitro*. The present study was undertaken to evaluate the effects of pinusolide on hypotension and bronchoconstriction due to PAF. PAF(i.v.) in doses of 0.01 to 0.3  $\mu\text{g}/\text{kg}$  induced a dose-dependent hypotension without tachyphylaxis in rat. Pinusolide(5~20  $\text{mg}/\text{kg}$ , i.v.) inhibited PAF(0.03  $\mu\text{g}/\text{kg}$ , i.v.)-induced hypotension dose-dependently, while it failed to block the hypotensive action of histamine, serotonin and acetylcholine. It inhibited bronchoconstriction and cutaneous vascular permeability induced by PAF in anesthetized guinea pigs and rats, respectively, but it showed no inhibitory effect on the increase in bronchial resistance by histamine and acetylcholine. These results strongly suggest that *in vivo* pinusolide acts as a selective antagonist of PAF.