factor-a production from RPMC. These results indicate that PVAE inhibits immediated-type allergic reactions in rats.

[PD3-9] [ 10/19/2000 (Thr) 15:00 - 16:00 / [Hall B] ]

## Inulin synergistically stimulates interferon-gamma-induced nitric oxide synthesis through NF-kappa B activation in RAW 264.7 cells

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## **ABSTRACT**

Nitric oxide (NO) mediates a number of the host-defense functions of activated macrophages, including antimicrobial and tumoricidal activity. We examined the effect of inulin on NO release in the cultured murine macrophage RAW 264.7 cells. Inulin alone had no effect, whereas inulin with recombinant interferon-? (rIFN-gamma) synergistically increased NO release from and iNOS expression in RAW 264.7 cells. Inulin-mediated NO release were inhibited by the tyrosine kinase inhibitor, genistein. Also, protein kinase C (PKC)-delta were involved in the inulin-induced NO production. Since iNOS gene transcriptions have been recently shown to be under the control of nuclear factor kappa-B (NF-kappa B)/Rel family of transcription factors, we assessed the effect of inulin on NF-kappa B/Rel using an electrophoretic mobility shift assay. Inulin strongly induced of NF-kappa B/Rel binding, whereas AP-1 binding was slightly induced in RAW 264.7 cells. Inulin also stimulated phosphorylation and degradation of Ikappa B-alpha. Taken together, these results indicate that inulin stimulates IFN-gamma-induced NO synthesis through NF-kappa B activation in RAW 264.7 cells.

[PD3-10] [ 10/19/2000 (Thr) 15:00 - 16:00 / [Hall B] ]

## Isolation and anti-thrombotic activity of phenolic components from Magnolia oboyata

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Magnolia obovata (Magnoliaceae) has long been used for the treatment of the thrombotic stroke, typhus fever, headache, gastrointestinal disorders, asthma and urinary problems. In the course of continuous work for the discovery of anti-thrombotic constituents from plants, several phenolic compounds were isolated from the methanol extract of bark, leaves and fruit of Magnolia obovata. The compounds were identified as methyl caffeate, syringin, magnolol, honokiol, and obovatol with the spectroscopic data. And the effects of them on platelet aggregation induced by sodium archidonate (in the presence of threshold concentration of collagen) were evaluated.

[PD3-11] [ 10/19/2000 (Thr) 15:00 - 16:00 / [Hall B] ]

Regulation of proinflammatory cytokines gene expression by oleanolic acid in mouse peritoneal Macrophages

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