**Results:** IS4 concentration inhibited the production of interleukin-1beta (IL-1β), interleukin-6 (IL-6), and granulocyte -macrophage colony-stimulating factor (GM-CSF) induced by LPS. IS4 at high concentrations (25 and 50'/ml) inhibited, in concentration-dependent manner, the expression of tumor necrosis factor-alpha (TNF—'α) stimulated by LPS.
**Conclusion:** IS4 has shown an anti-inflammatory effect in RAW 264.7 cells.
**Key words:** cytokine; GM-CSF; IL-1β; IL-6; lipopolysaccharide; TNF—α

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## Effects of Atractylodis Rhizoma Pharmacopuncture on an Acute Gastric Mucosal Lesion Induced by Compound 48/80 in Rats

Yun-Kyu Lee, Jae-Soo Kim, Seong-Chul Lim

### Abstract
**Objectives:** This study was designed to investigate the protective effects of Atractylodis Rhizoma pharmacopuncture (ARP) against acute gastric mucosal lesions induced by compound 48/80 in rats.
**Methods:** The ARP was injected in Joksamni (ST36) and Jungwan (CV12) 1 hr before treatment with compound 48/80. The animals were sacrificed under anesthesia 3 hrs after treatment with compound 48/80. The stomachs were removed, and the amounts of gastric adherent mucus, gastric mucosal hexosamine, thiobarbituric acid reactive substances (TBARS), xanthine oxidase (XO), and superoxide dismutase (SOD) were measured. Also, histological examination were performed.
**Results:** Gastric adherent mucus, gastric mucosal hexosamine and histological defects of gastric mucosa declined significantly after ARP treatment. Changes in gastric mucosal TBARS were also reduced by ARP treatment, but this result was not statistically significant. ARP treatment did not change the XO and the SOD activities.
**Conclusions:** ARP showed protective effects for acute gastric mucosal lesions induced by compound 48/80 in rats. These results suggest that ARP may have protective effects for gastritis.
**Key words:** Acupuncture; Acute gastric mucosal lesion; ARP (Atractylodis Rhizoma pharmacopuncture); Compound 48/80; Joksamni (ST36); Jung-wan (CV12)

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## Identification and Expression Analysis of Chloroplast p-psbB Gene Differentially Expressed in Wild Ginseng

Doo-Young Kim, Ki-Rok Kwon, Won-Mo Kang, Eun-Yi Jeon, Jun-Hyeog Jang

### Abstract
Panax ginseng is a well-known herbal medicine in traditional Asian medicine. Although wild ginseng is widely accepted to be more active than cultivated ginseng in chemoprevention, little has actually been reported on the difference between wild ginseng and cultivated ginseng. Using suppressive subtraction hybridization, we cloned the p-psbB gene as a candidate target gene for a wild ginseng-specific gene. Here, we report that one of the clones isolated in this screen was the chloroplast p-psbB gene, a chlorophyll a-binding inner antenna protein in the photosystem II complex, located in the lipid matrix of the thylakoid membrane. Real-time results showed that the expression of the p-psbB gene was significantly up-regulated in wild ginseng as compared to cultivated ginseng. Thus, the p-psbB gene may be one of the important markers of wild ginseng.
**Key words:** Cultivated ginseng; PCR; p-psbB gene; suppressive subtraction hybridization (SSH); wild ginseng

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