

(3,4-dihydro-4-hydroxy-6-methoxy-2H-1-benzopyran) and (-)-balanophonin.

[PD2-4] [10/19/2001 (Fri) 14:00 – 17:00 / Hall D]

Production of Polyclonal Antibodies against Ginsenoside Rg₃-Bovine Serum Albumin Conjugate

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In order to establish enzyme-linked immunosorbent assay for the determination of protopanaxadiol, polyclonal antibodies were raised from rabbits using ginsenoside Rg₃ (GRg₃)-bovine serum albumin (BSA) conjugate as immunogen.

GRg₃ was conjugated with BSA by periodate oxidation method through its glucose moiety. 2 mg GRg₃-BSA conjugate were dissolved in 1 ml saline and emulsified with the same volume of complete Freund's adjuvant. 1 ml emulsion was then injected twice at a biweekly interval into each rabbit subcutaneously and intramuscularly at multiple sites on the back and legs. The same dose of the conjugate emulsified with incomplete Freund's adjuvant in the same ratio was used as a booster, and given intramuscularly on the legs once every 2 weeks. Blood was obtained from a marginal ear vein 11 days after the booster injections.

Both GRg₃ and protopanaxadiol competitively inhibited the antibody binding to GRg₃-ovalbumin on solid phase, a coated antigen on the well. Further characterization of the antibody is under investigation.

[PD2-5] [10/19/2001 (Fri) 14:00 – 17:00 / Hall D]

Study of constituents from head of *Panax ginseng* and the evaluation of its antigastritic and antiulcerative effects

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Head of *Panax ginseng* C. A. Meyer indicates its growth number of years and it has been widely used for supplying energy to weak person. However the underlying mechanisms are not sufficiently reported so far.

We previously reported the antigastritic and antiulcerative effect of the head of *Panax ginseng* methanol extract and butanol fraction on several gastritis and ulcer models in rats.

It is generally known that gastritis is induced by imbalance between aggressive factors and protective factors. Nowadays, as the roles of inflammatory response and free radicals are emerged, the components that have free radical scavenging effects are highlighted.

Thus, the present study deals with the protein ratio, free radical scavenging effect, effect on gastritis model in rats and separation of the head of *Panax ginseng*. Butanol fraction was separated into 6 subfractions by silica gel chromatography with chloroform: methanol(10-50% gradient). Among 6 fractions, fr.5 was significantly effective on HCl-ethanol gastritis model in rats. Fr.5 was separated into six sub-subfractions with chloroform: methanol: water (20.3: 10.7: 2.3), and three of sub-subfractions (fr.5-2, 5-3, 5-4) showed the most significant effectiveness.

[PD2-6] [10/19/2001 (Fri) 14:00 – 17:00 / Hall D]

Identification and Analysis of Astragalosides from Adventitious Root Cultures of *Astragalus mongholicus*