

2-dimensional NMR spectral analyses. They showed dose-dependent inhibitions on NO syntheses and the IC<sub>50</sub>'s were 3.1, 3.8 µg/ml, respectively. The spectral data and activity mechanism of these compounds will be discussed. These new inhibitors of iNOS may have potential in the treatment of endotoxemia and inflammation accompanied by the overproduction of NO.

[PD2-31] [ 10/19/2001 (Fri) 14:00 - 17:00 / Hall D ]

### **Curcumin and its analogue, inhibitor of Farnesyl Protein Transferase, isolated from *Curcuma longa* L.**

Kang HyunMi, Jeon SunBok, Lee SeungHo, Yang DeokCho, Kwon ByoungMog

Antibiotics Research Laboratory, Korea Research Institute of Bioscience and Biotechnology P.O. Box 115, Yusung Taejon 305-333 Korea, College of Natural Science, Chungbuk National University

Farnesyl-protein transferase(FPTase) catalyzes the farnesylation of Ras protein on the cysteine residue near the C-terminus, which is critical for triggering ras oncogene toward tumor formation. During the course of a screening program for inhibitors of FPTase from natural products, inhibitors were isolated from the roots of *Curcuma longa* L. Curcumin and its analogue were isolated from *C. longa* L. Curcumin exhibited strong inhibition activity against FPTase. FPTase inhibitors were purified by silica and LH-20 column chromatography. Structures of the compounds were determined by NMR and MS spectroscopy. FPTase inhibitory activity was measured against partially purified FPTase enzyme, prepared from rat brain, and biotin-YRASNRSCAIM acceptor peptide using a scintillation proximity assay method. The compounds were also evaluated for cytotoxicity against five human tumor cell lines.

[PD2-32] [ 10/19/2001 (Fri) 14:00 - 17:00 / Hall D ]

### **Anti-complement of terpenoids from the spores of *Ganoderma lucidum***

Min ByungSun<sup>o</sup>, Gao JiangJung, Hattori Masao, Kim YoungHo, Bae KiHwan, Kim JungHee, Kwon OkKyung, Oh SeiRyang, Lee HyeongKyu

Korea Research Institute of Bioscience & Biotechnology, Taejon 305-600, Korea, Institute of Natural Medicine, Toyama Medical & Pharmaceutical University, Toyama 930-0194, Japan, College of Pharmacy, Chungnam National University, Taejon 305-764, Korea

A new lanostane-type terpenoid, lucidenic acid SP1 (1), was isolated from a chloroform-soluble fraction of the spores of *Ganoderma lucidum* together with four known compounds (2-5). The structure of lucidenic acid SP1 was determined as 3β,7β-dihydroxy-4,4,14α-trimethyl-11,15-dioxo-5α-chole-8-ene-24-oic acid by spectroscopic means including 2D-NMR. The anticomplementary property of 1-5 was investigated *in vitro*. Furthermore, triterpenes (6-12) isolated from the same spores were tested for their anticomplementary activity. Compounds 1-5 were inactive, whereas ganoderiol F (8), ganodermanondiol (9) and ganodermanontriol (10) showed a strong anticomplement activity against the classical pathway (CP) of the complement system with IC<sub>50</sub> values of 4.8, 41.7 and 17.2 µM, respectively. The inhibitory potency of triterpene alcohols 8-10 on the CP activity increased accompanied by increase in terminal hydroxymethyl group of the side chain moiety. On the other hand, ganoderic acid 1-7, which are present a carboxyl group in the side chain, and lucidumols A and B (11-12) were inactive on this system.

[PD2-33] [ 10/19/2001 (Fri) 14:00 - 17:00 / Hall D ]

### **Isolation of Anti-Septic Shock Agents from Moutan Cortex**

Li Gao<sup>o</sup> Sung-Hwan Kim Ming-Lu Xu Jae-Hyun Kim \*Dong-Keun Song Jong-Keun Son