

### Effect of G009 on Lipid Peroxidation Induced by Peroxidizer in Rats

Lee, June-Woo<sup>o</sup>, Kee-Nam Kim, Hoon Jeong, Seung-Mok Lee,  
Man-Deuk Han, Seung-Yong Lee and Sang-Mo Kang<sup>1</sup>

*Biotechnology Lab., Central Research Institute, Il Yang  
Pharmaceutical Co. Ltd., Yongin, 449-900, Korea and <sup>1</sup>Department  
of Microbiological Engineering, College of Engineering, KonKuk  
University, Seoul, 110-750, Korea*

In order to elucidate the correlation between the lipid peroxidation and hepatotoxicity, the formation of malondialdehyde (MDA) in liver homogenate and serum, and the transaminase activities were determined in intoxicated by ascorbic acid-Fe<sup>2+</sup>-ADP in rat. In a model of ascorbic acid-Fe<sup>2+</sup>-ADP hepatotoxicity, G009, which was obtained from *Ganoderma lucidum* IY009, exhibited anti-lipid peroxidative effect in rat liver homogenate, and that MDA values of the liver homogenate decreased from 48.1% to 74.8% in comparison to controls (p<0.01). Also, the MDA formation in serum inhibited 66.5% at 100 mg/kg of G009. Serum levels of glutamic oxaloacetic transaminase(GOT) and glutamic pyruvic transaminase (GPT) in peroxidizer-induced rats treated with G009 was decreased compared with control. Especially, The formation of lipid peroxides in serum was related to GPT levels.

These results that G009 has a protective effect on ascorbic acid-Fe<sup>2+</sup>-ADP-induced hepatic injury through an inhibition of lipid peroxidation in liver.