

Journal of  
Tohoku Pharmaceutical University  
No.53 (2006)

==== Contents ====

Reviews

Kiyoshi Nagata :

- Molecular Studies of Induction Mechanism and Individual Differences in Drug  
Metabolizing Enzymes ----- 1

Jin-ichi Inokuchi :

- Ganglioside GM3 and Type 2 Diabetes ----- 23

Originals

Erika Matsuoka, Koichi Machida, and Masao Kikuchi :

- Studies on the Constituents of *Hypericum* Species. V. Absolute Structure  
of a Phenylpropanated Flavan 3-ol Derivative from *Hypericum erectum* THUNB. ----- 31

Erika Matsuoka, Koichi Machida, and Masao Kikuchi :

- Studies on the Constituents of *Hypericum* Species. VI Chemical Structures  
of Arylglycerol Glycosides from *Hypericum erectum* THUNB. ----- 37

Kazuki Toyoda, Yasunori Yaoita, and Masao Kikuchi :

- Chemical Constituents of the Genus *Ligularia* Plants. IV. Chemical Stability of  
5,6-Dimethoxy-2-isopropenylbenzofuran Isolated from the Roots of *Ligularia*  
*stenocephala* MATSUM. et KOIDZ. ----- 43

Kazuki Toyoda, Yasunori Yaoita, and Masao Kikuchi :

- Chemical Constituents of the Genus *Ligularia* Plants. V. New Constituents from  
the Roots and Leaves of *Ligularia stenocephala* MATSUM. et KOIDZ. ----- 51

Yoshio Okawa, Miki Kojima, Toshihiro Ishizaki, Yoshifumi Nakamura, Yuko Matsuda,  
Yoko WATARI, and Shuiti Naitoa :

- Cytotoxicity of *Candida albicans* Mannan in Macrophages ----- 57

Fukie Nijima, Masakazu Shimoda, Aya Yoshida, Osamu Nakagawasai, Koichi Tan-No,  
and Takeshi Tadano :

- Accelerated Gastrointestinal Transit Induced by Intermittent Rapid Eye Movement  
(REM) Sleep Deprivation Treatment in Mice ----- 63

Daisuke Nakayama, Hiroyuki Watanabe, Tsutomu Fujimura, and Shinobu Sakurada :

- Involvement of  $\mu$ -opioid receptor on the antinociception induced by supraspinal  
administration of Tyr-D-Pro-Trp-Gly-NH<sub>2</sub> ----- 71

Yukie Imamura, Tomoko Kubota, Kanako Takanashi, Satoe Mori, Ryota Yohshida, Kana Wada, Kaori Okuyama, Motoaki Takayanagi, and Isao Ohno :	
The effect of sex hormone on antigen-induced Th1/Th2 cytokine production -----	77
Susumu Kawano, Risa Ito, Miharuru Nishiyama, Mai Kubo, Tomoko Matsushima, Akihiro Ambo, and Yusuke Sasaki :	
Receptor binding properties and antinociceptive effects of chimeric peptides consisting of a $\mu$ -opioid receptor agonist and an ORL-1 receptor antagonist -----	85
Akifumi Oda, Tomoki Yoshida, Megumi Okayasu, Yukiko Kamiyama, Ohgi Takahashi, and Hisao Matsuzaki :	
Computational Docking of HIV-1 protease, p38 and CDK-2 for Software Validation -----	93
Keiko Fujii, Mika Saito, Koutaro Kato, Yukisumi Iizuka, Kunio Itoh, and Yori-hisa Tanaka :	
Effect of selenium deficiency on rat liver drug-metabolizing enzymes -----	99
Koji Uwai, Risa Yamada, Ryusho Oka, Yoshito Nakagawa, and Mitsuhiro Takeshita :	
Inhibitory effects of various fruit juices on human and rat CYP3A activity -----	109
Ryuichiro Ando, Chizuko Watanabe, and Syuki Ojima :	
Power spectrum analysis of the cardiovascular parameter variability in rat vascular pain model -----	117
Masahiro Kataoka :	
Calculations of C-C Bond Lengths, Electronic Spectrum and Magnetic Susceptibility of Circular [8] Phenylene -----	125
Abstracts of Published Papers -----	129
Titles of Papers Presented at Scientific Meeting -----	161