

of reactant solution: 19.1~29.0% Molar concentration ratio of two reactant: [Sod. silicate]/[Mag. sulfate]:1.47~1.80 Temperature of Washing water: 45~48°C Drying temperature: 65~82°C The physical and chemical properties of Magnesium trisilicate as medicine were studied by use of chemical analysis and acid consuming capacity measurements.

[PD1-11] [10/20/2000 (Fri) 11:30 - 12:30 / [Hall B]]

Synthesis of benzastatin derivatives as plausible antioxidants

Cho WJ¹, Yoo ID², Hong ND³, Lee JH¹, Thanh LN⁰¹

¹ College of Pharmacy, Chonnam National University, ² Korea Research Institute of Bioscience & Biotechnology, ³ Jakwang Institute, Han Kook Sin Yak

Oxygen is essential for life as the terminal oxidant in cell respiration except for some anaerobic microorganism. The oxygen molecule is usually stable in a normal condition, however it can be converted to the reactive species such as hydroxyl radical, hydrogen peroxide and singlet oxygen under certain chemical or physical conditions. It is well known that reactive oxygen molecule causes cell injury by destruction of cell components. For therapeutic treatment against diseases caused by oxidative damage the lipid peroxidation inhibitors with antioxidative activity and free radical scavenging activity have been used.

Recently, seven benzastatins which have been found to show inhibitory activity against glutamate toxicity and lipid peroxidation in rat liver microsomes were isolated from the culture broth of *Streptomyces Nitrosporeus* 30643. Aiming at the study of structure-activity relationship of benzastatins, we have tried to develop an efficient synthetic method. A novel synthetic process of benzastatin analogs will be presented.

[PD1-12] [10/20/2000 (Fri) 11:30 - 12:30 / [Hall B]]

Enantioselective synthetic method for 3-hydroxyflavanones: an approach to (2R, 3R)-3',4'-O-dimethyltaxifolin

Jew SS, Kim HA, Bae SY, Kim JH, Park HG

College of Pharmacy, Seoul National University, Seoul 151-742, South Korea

A new enantioselective synthetic method for (2R,3R)-3-hydroxyflavanone(1a) was developed via asymmetric dihydroxylation(ADH) and intramolecular Mitsunobu reaction as key reactions and the application to synthesis of (2R, 3R)-3',4'-O-dimethyltaxifolin (1b) is described. By this new synthetic method, (2R, 3R)-3',4'-O-dimethyltaxifolin was prepared from methyl 3,4-dimethoxycinnamate in seven steps(8%, 99% ee).

[PD1-13] [10/20/2000 (Fri) 11:30 - 12:30 / [Hall B]]

Synthesis of Novel 3-Alkoxy-4-oxo-1,2-benzothiazine Derivatives for COX-2 Inhibitors

Park Myung-Sook⁰, Kwon Soon-Kyung, Shin Hae-Soon

College of Pharmacy, Duksung Women's University

We report the synthesis of key intermediates for dimerization and several 3-alkoxy derivatives and propose a mechanism of the dehydration of alcohols. The 4-hydroxy-2H-1,2-benzothiazine-3-