

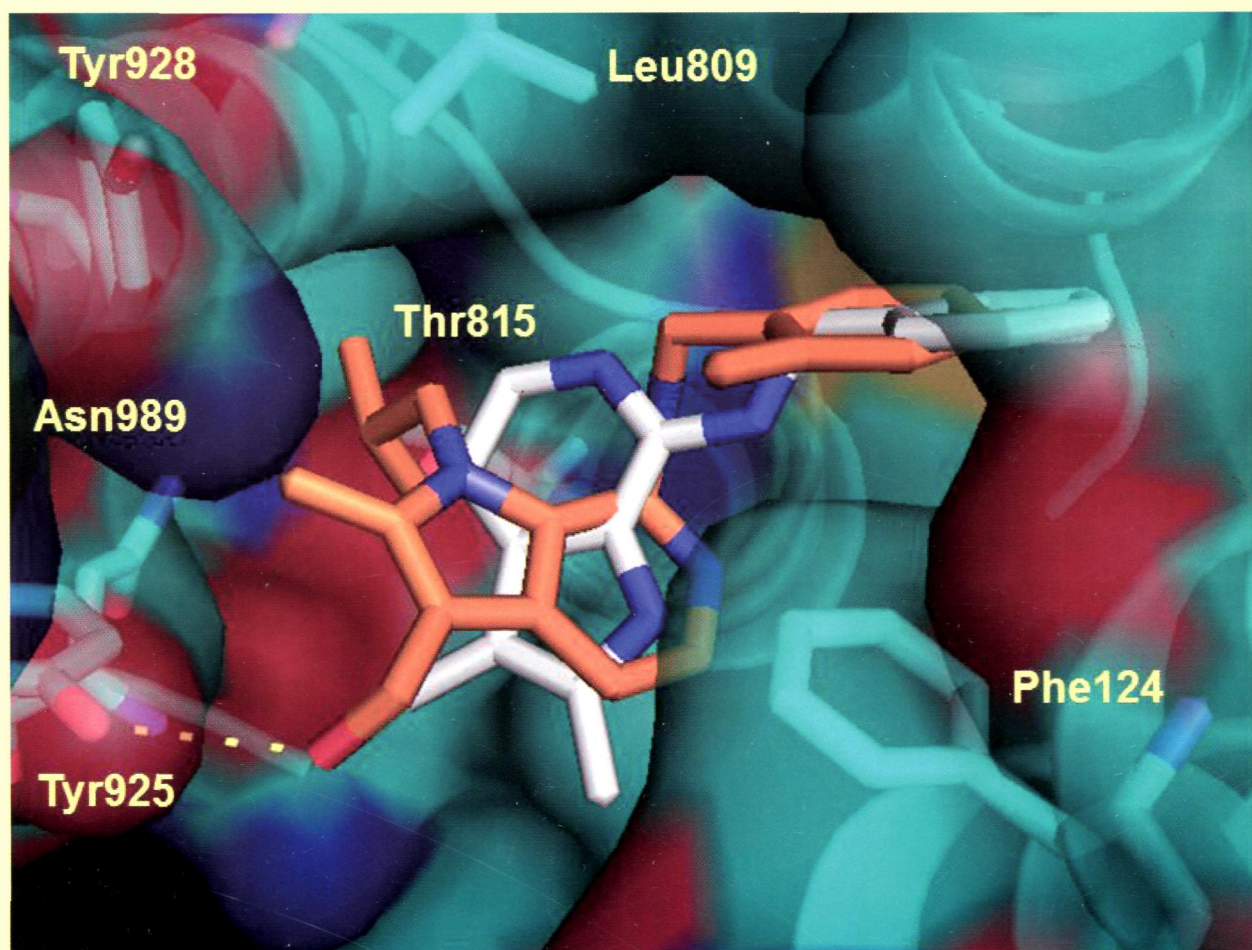
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# Chemical and Pharmaceutical Bulletin

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Vol. 62 No. 4

CPBTAL 62 (4) 309–398 (2014)



Molecular Modeling, Design, Synthesis, and Biological Activity of  
*1H*-Pyrrolo[2,3-*c*]pyridine-7-amine Derivatives as Potassium-Competitive  
Acid Blockers

pp. 336–342



THE PHARMACEUTICAL SOCIETY OF JAPAN

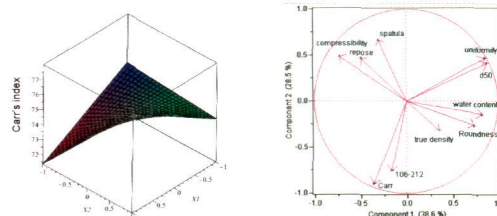
<http://cpb.pharm.or.jp>

## Regular Articles

### Evaluation of the Physicochemical Properties of Fine Globular Granules Prepared by a Multi-functional Rotor Processor

S. Kimura, Y. Iwao, M. Ishida, S. Noguchi, S. Itai, S. Uchida, M. Yamada, and N. Namiki

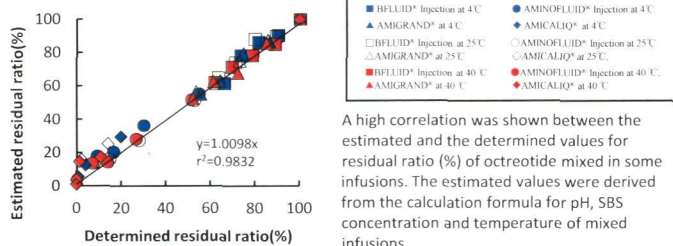
Multiple regression analysis and principal component analysis (PCA) have been used in the present study to examine the relationships between the operational conditions of a unique multi-functional rotor processor for the preparation of granules and a series of associated micromeritics, including the flowability, granule mean size and true density values.



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### Prediction of the Stability of Octreotide in a Mixed Infusion

Y. Takasu, M. Yoshida, K. Shimizu, K. Asahara, M. Tange, and T. Uchida

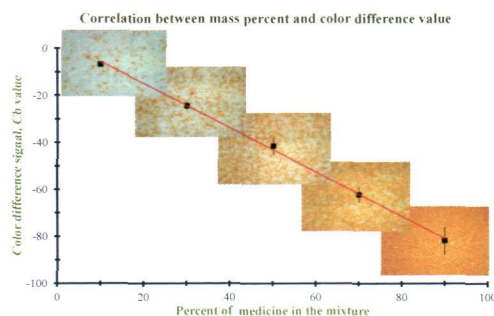


A high correlation was shown between the estimated and the determined values for residual ratio (%) of octreotide mixed in some infusions. The estimated values were derived from the calculation formula for pH, SBS concentration and temperature of mixed infusions.

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### Assessment of Blending Ratio of Powdered Medicine Mixtures by Image Analysis

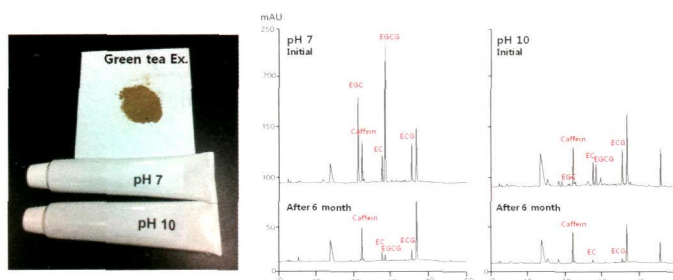
Y. Miyazaki, K. Miyawaki, T. Uchino, and Y. Kagawa



pp. 322–327

### Analysis of Green Tea Compounds and Their Stability in Dentifrices of Different pH Levels

J.-H. Jang, Y.-D. Park, H.-K. Ahn, S.-J. Kim, J.-Y. Lee, E.-C. Kim, Y.-S. Chang, Y.-J. Song, and H.-J. Kwon

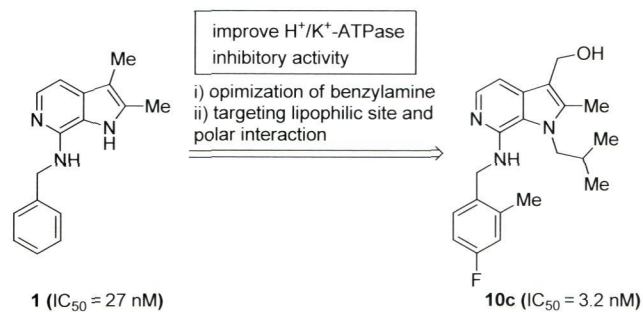


pp. 328–335

### Molecular Modeling, Design, Synthesis, and Biological Activity of 1*H*-Pyrrolo[2,3-*c*]pyridine-7-amine Derivatives as Potassium-Competitive Acid Blockers

Y. Arikawa, A. Hasuoka, K. Hirase, N. Inatomi, F. Sato, Y. Hori, T. Takagi, N. Tarui, M. Kawamoto, and M. Kajino

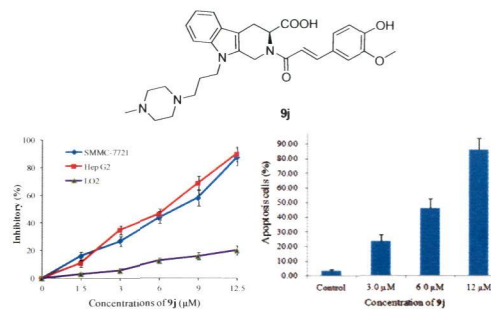
pp. 336–342



### Synthesis and *in Vitro* Biological Evaluation of Hybrids from Tetrahydro- $\beta$ -carboline and Hydroxycinnamic Acid as Antitumor Carcinoma Agents

Y. Lin, X. Xia, R. Yao, L. Ni, J. Hu, W. Guo, and B. Zhu

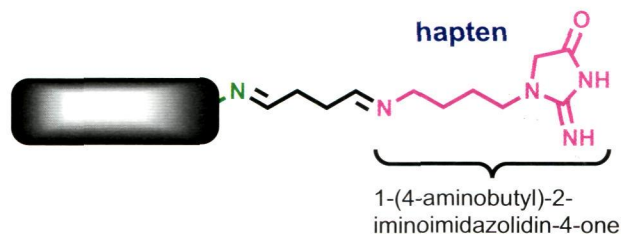
pp. 343–349



### Synthesis of 1-(4-Aminobutyl)-2-iminoimidazolidin-4-one Aimed at Preparation of a Creatinine-Specific Antibody

S. Moriya, N. Terayama, K. Hiramatsu, M. Kawakita, T. Kiryu, T. Kawanishi, E. Yasui, and S. Nagumo

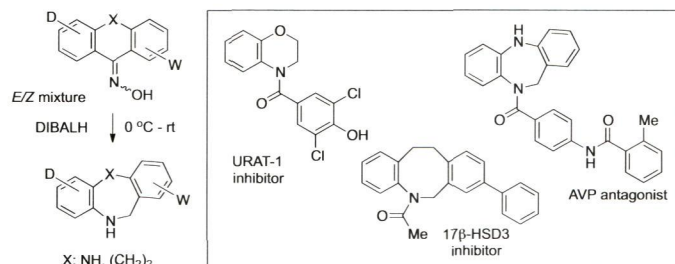
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### Synthesis of a Human Urate Transporter-1 Inhibitor, an Arginine Vasopressin Antagonist, and a 17 $\beta$ -Hydroxysteroid Dehydrogenase Type-3 Inhibitor, Using Ring-Expansion of Cyclic Ketoximes with DIBALH

H. Cho, Y. Iwama, K. Okano, and H. Tokuyama

pp. 354–363



### Grevillosides J–Q, Arbutin Derivatives from the Leaves of *Grevillea robusta* and Their Melanogenesis Inhibitory Activity

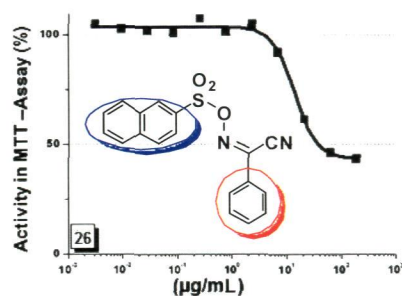
Y. Yamashita-Higuchi, S. Sugimoto, K. Matsunami, H. Otsuka, and T. Nakai

pp. 364–372



### Synthesis, Characterization and Anti-proliferation Activities of Novel Cyano Oximino Sulfonate Esters

A. El-Faham, Y. A. Elnakdy, S. A. M. El Gazzar, M. M. Abd El-Rahman, and Sh. N. Khattab

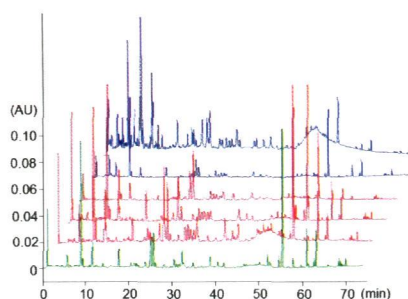


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### Notes

#### Quality Evaluation of Medicinal Products and Health Foods Containing Chaste Berry (*Vitex agnus-castus*) in Japanese, European and American Markets

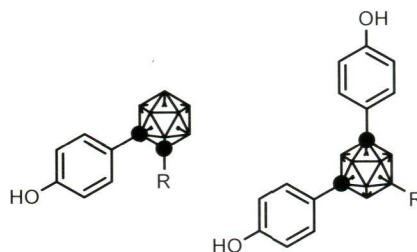
M. Fukahori, S. Kobayashi, Y. Naraki, T. Sasaki, H. Oka, M. Seki, S. Masada-Atsumi, T. Hakamatsuka, and Y. Goda



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#### Aliphatic Substitution of *o*-Carboranyl Phenols Enhances Estrogen Receptor Beta Selectivity

K. Ohta, T. Ogawa, A. Kaise, A. Oda, and Y. Endo

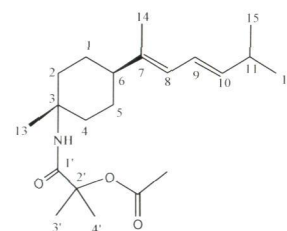


An alkyl substituent of *o*-carboranyl phenol is more effective for ER $\beta$  subtype selectivity than that of *m*-carborane bisphenol

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#### New Nitrogenous Bisabolene-Type Sesquiterpenes from a Formosan Sponge *Axinyssa* sp.

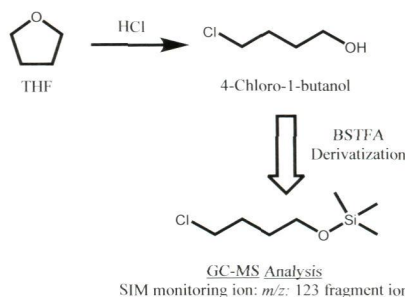
W. Liu, K.-J. Liang, C.-Y. Chiang, M.-C. Lu, and J.-H. Su



pp. 392–394

#### Development and Validation of a Sensitive GC-MS Method for the Determination of Alkylating Agent, 4-Chloro-1-butanol, in Active Pharmaceutical Ingredients

K. Harigaya, H. Yamada, K. Yaku, H. Nishi, and J. Haginaka



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