

## CONTENTS Vol. 145, No. 4

### Rapid Communication

Molecular Phenotyping of Mannosyltransferases-Deficient *Candida albicans* Cells by High-Resolution Magic Angle Spinning NMR

E. Maes, C. Mille, X. Trivelli,  
G. Janbon, D. Poulain and  
Y. Guérardel 413

Serine Racemase with Catalytically Active Lysinoalanyl Residue

T. Yamauchi, M. Goto, H.-Y. Wu,  
T. Uo, T. Yoshimura, H. Mihara,  
T. Kurihara, I. Miyahara, K. Hirotsu  
and N. Esaki 421

Peroxiredoxin III-deficiency Sensitizes Macrophages to Oxidative Stress

L. Li, T. Kaifu, M. Obinata and  
T. Takai 425

### Regular Papers

Concerted Effects of Two Activator Modules on the Group I Ribozyme Reaction

Y. Ikawa, T. Shiohara, S. Ohuchi and  
T. Inoue 429

Identification and Functional Characterization of Rat Riboflavin Transporter 2

S. Yamamoto, K. Inoue, K.-y. Ohta,  
R. Fukatsu, J.-y. Maeda, Y. Yoshida  
and H. Yuasa 437

Functional Expression of Miraculin, a Taste-Modifying Protein in *Escherichia Coli*

T. Matsuyama, M. Satoh, R. Nakata,  
T. Aoyama and H. Inoue 445

Highly Active Low Magnesium Hammerhead Ribozyme

A. Fedoruk-Wyszomirska,  
M. Szymański, E. Wyszko,  
M.Z. Barciszewska and  
J. Barciszewski 451

Colicin E5 Ribonuclease Domain Cleaves *Saccharomyces cerevisiae* tRNAs Leading to Impairment of the Cell Growth

T. Ogawa, M. Hidaka, K. Kohno and  
H. Masaki 461

Closed Complex of the D-3-Hydroxybutyrate Dehydrogenase Induced by an Enantiomeric Competitive Inhibitor

K. Nakashima, K. Ito, Y. Nakajima,  
R. Yamazawa, S. Miyakawa and  
T. Yoshimoto 467

*In Vitro* and *In Vivo* Interactions of Ferredoxin-NADP<sup>+</sup> Reductases in *Pseudomonas putida*

J. Yeom, C.O. Jeon, E.L. Madsen and  
W. Park 481

Gene Identification and Characterization of 5-Formyl-3-Hydroxy-2-Methylpyridine 4-Carboxylic Acid 5-Dehydrogenase, an NAD<sup>+</sup>-Dependent Dismutase

N. Yokochi, Y. Yoshikane,  
S. Matsumoto, M. Fujisawa,  
K. Ohnishi and T. Yagi 493

Cooperative Binding of L-Trp to Human Tryptophan 2,3-Dioxygenase: Resonance Raman Spectroscopic Analysis

E. Fukumura, H. Sugimoto,  
Y. Misumi, T. Ogura and Y. Shiro 505

Protein Oxidation During Long Storage: Identification of the Oxidation Sites in Dihydrofolate Reductase from *Escherichia coli* through LC-MS and Fragment Studies

T. Takenawa, A. Yokota, M. Oda,  
H. Takahashi and M. Iwakura 517

Cloning and Expression of the MutM Gene from Obligate Anaerobic Bacterium *Desulfovibrio vulgaris* (Miyazaki F)

H. Sanada, T. Nakanishi, H. Inoue  
and M. Kitamura 525

Construction of the Plasmid, Expression by Chinese Hamster Ovary Cell, Purification and Characterization of the First Three Short Consensus Repeat Modules of Human Complement Receptor Type 1

A. Yamaguchi, H. Takagawa,  
H. Iwakaji, S. Miyagawa, P.-C. Wang  
and N. Ishii

533

Interactions Between Histidine and Tryptophan Residues in the BM2 Proton Channel from Influenza B Virus

K. Otomo, A. Toyama, T. Miura and  
H. Takeuchi

543