



**MOLECULAR BIOLOGY****Molecular Biology General**

|  |  |     |
|--|--|-----|
| Molecular Cloning and Characterization of cDNAs Encoding Two Isoforms of Ribulose-1,5-Bisphosphate Carboxylase/Oxygenase Activase in Rice ( <i>Oryza sativa L.</i> ) | Z. Zhang and S. Komatsu  | 383 |
| Characterization of L-Lysine 6-Aminotransferase and Its Structural Gene from <i>Flavobacterium lutescens</i> IFO3084   | T. Fujii, T. Narita, H. Agematsu, N. Agata, and K. Isshiki       | 391 |
| A Subunit of the Mammalian Oligosaccharyltransferase, DAD1, Interacts with Mcl-1, One of the bcl-2 Protein Family  | T. Makishima, M. Yoshimi, S. Komiyama, N. Hara, and T. Nishimoto | 399 |

**Structure and Function of Genes and Other Genetic Materials**

|   |                                   |     |
|---|-----------------------------------|-----|
| Production of Three Distinct mRNAs of 150 kDa Oxygen-Regulated Protein (ORP150) by Alternative Promoters: Preferential Induction of One Species under Stress Conditions | S. Kaneda, T. Yura, and H. Yanagi | 529 |
|---|-----------------------------------|-----|

**Regulation of Gene Expression**

|  |   |     |
|--|---|-----|
| Transcriptional Regulation of the Human <i>FTZ-F1</i> Gene Encoding Ad4BP/SF-1 | K. Oba, T. Yanase, I. Ichino, K. Goto, R. Takayanagi, and H. Nawata | 517 |
|--|---|-----|

**CELL****Differentiation, Development, and Aging**

|  |  |     |
|--|--|-----|
| Hydrolysis and Synthesis of Substrate Proteins for Cathepsin L in the Brain Basement Membranes of <i>Sarcophaga</i> during Metamorphosis | I. Fujii-Taira, Y. Tanaka, K.J. Homma, and S. Natori | 539 |
|--|--|-----|

**Extracellular Matrices and Cell Adhesion Molecules**

|  |  |     |
|--|--|-----|
| Differential Expression of Mouse $\alpha 5(\text{IV})$ and $\alpha 6(\text{IV})$ Collagen Genes in Epithelial Basement Membranes | K. Saito, I. Naito, T. Seki, T. Oohashi, E. Kimura, R. Momota, Y. Kishiro, Y. Sado, H. Yoshioka, and Y. Ninomiya | 427 |
|--|--|-----|

**Protein Targeting and Sorting**

|   |   |     |
|---|---|-----|
| Three Leucine-Rich Sequences and the N-Terminal Region of Double-Stranded RNA-Activated Protein Kinase (PKR) Are Responsible for Its Cytoplasmic Localization | T. Takizawa, C. Tatematsu, M. Watanabe, M. Yoshida, and K. Nakajima | 471 |
|---|---|-----|

**Cell Cycle Control**

|   |  |     |
|---|--|-----|
| Activation of Actin-Activated MgATPase Activity of Myosin II by Phosphorylation with MAPK-Activated Protein Kinase-1b (RSK-2) | F. Suizu, K. Ueda, T. Iwasaki, M. Murata-Hori, and H. Hosoya | 435 |
|---|--|-----|

**Cell Death**

|  |   |     |
|--|---|-----|
| Depletion of Intracellular NAD <sup>+</sup> and ATP Levels during Ricin-Induced Apoptosis through the Specific Ribosomal Inactivation Results in the Cytolysis of U937 Cells | N. Komatsu, M. Nakagawa, T. Oda, and T. Muramatsu | 463 |
|--|---|-----|

**BIOTECHNOLOGY****Gene and Protein Engineering**

|  |  |     |
|--|--|-----|
| Substrate Specificity Analysis of Microbial Transglutaminase Using Proteinaceous Protease Inhibitors as Natural Model Substrates | S. Taguchi, K. Nishihama, K. Igi, K. Ito, H. Taira, M. Motoki, and H. Momose | 415 |
|--|--|-----|

**Immunological Engineering**

|   |   |     |
|---|---|-----|
| Molecular Mimicry of Human Tumor Antigen by Heavy Chain CDR3 Sequence of the Anti-Idiotypic Antibody <i>Rapid Communication</i> | D. Luo, W. Qi, J. Ma, Y.J. Wang, and D. Wishart | 345 |
|---|---|-----|

543

**CORRECTIONS**

## **CONTENTS Rearranged According to Subject Categories, Vol. 128, No. 3**

### **BIOCHEMISTRY**

#### **Biochemistry General**

- Protein N-Arginine Methylation in Subcellular Fractions of Lymphoblastoid Cells C.-H. Lin, M. Hsieh, Y.-C. Li, S.-Y. Li, D.L. Pearson, K.M. Pollard, and C. Li 493

#### **Physiological Chemistry**

- Manganese Administration Induces the Increased Production of Dopamine Sulfate and Depletion of Dopamine in Sprague-Dawley Rats J.G. Shirani Ranasinghe, M.-C. Liu, Y. Sakakibara, and M. Suiko 477

#### **Biomolecular Structures**

- Crystal Structure of the Pyridoxal 5'-phosphate Dependent L-Methionine  $\gamma$ -Lyase from *Pseudomonas putida* *Rapid Communication* H. Motoshima, K. Inagaki, T. Kumasaki, M. Furuichi, H. Inoue, T. Tamura, N. Esaki, K. Soda, N. Tanaka, M. Yamamoto, and H. Tanaka 349

#### **Glycobiology and Carbohydrate Biochemistry**

- Ligand-Binding Properties of Annexin from *Caenorhabditis elegans* (Annexin XVI, Nex-1) A. Satoh, M. Hazuki, K. Kojima, J. Hirabayashi, and I. Matsumoto 377

- Common Architecture of the Primary Galactose Binding Sites of *Erythrina corallodendron* Lectin and Heat-Labile Enterotoxin from *Escherichia coli* in Relation to the Binding of Branched Neolactohexaosylceramide S. Teneberg, A. Berntsson, and J. Ångstrom 481

#### **Protein and Peptide Chemistry**

- Disulfide Bonds in Rat Cutaneous Fatty Acid-Binding Protein S. Odani, Y. Namba, A. Ishii, T. Ono, and H. Fujii 355

- Modulation of the Peptide-Binding Specificity of a Single-Chain Class II Major Histocompatibility Complex S.T. Kim and S.M. Byun 449

- Synthesis of a Molt-Inhibiting Hormone of the American Crayfish, *Procambarus clarkii*, and Determination of the Location of Its Disulfide Linkages T. Kawakami, C. Toda, K. Akaji, T. Nishimura, T. Nakatsuji, K. Ueno, M. Sonobe, H. Sonobe, and S. Aimoto 455

#### **Enzymology**

- States of Tryptophyl Residues and Stability of Recombinant Human Matrix Metalloproteinase 7 (Matrilysin) as Examined by Fluorescence K. Inouye, H. Tanaka, and H. Oneda 363

- Directed Evolution to Improve the Thermostability of Prolyl Endopeptidase H. Uchiyama, T. Inaoka, T. Ohkuma-Soyejima, H. Togame, Y. Shibanaka, T. Yoshimoto, and T. Kokubo 441

#### **Biochemistry of Proteolysis**

- Subsite Preferences of Pepstatin-Insensitive Carboxyl Proteinases from Prokaryotes: Kumamolysin, a Thermostable Pepstatin-Insensitive Carboxyl Proteinase K. Oda, S. Ogasawara, H. Oyama, and B.M. Dunn 499

#### **Biological Oxidation and Bioenergetics**

- Purification and Characterization of Cytochrome c-553 from *Helicobacter pylori* S. Koyanagi, K. Nagata, T. Tamura, S. Tsukita, and N. Sone 371

#### **Neurochemistry**

- Two Distinct Mechanisms Underlie the Stimulation of Neurotransmitter Release by Phorbol Esters in Clonal Rat Pheochromocytoma PC12 Cells S. Iwasaki, M. Kataoka, M. Sekiguchi, Y. Shimazaki, K. Sato, and M. Takahashi 407

- Tripeptidyl Peptidase I, the Late Infantile Neuronal Ceroid Lipofuscinosis Gene Product, Initiates the Lysosomal Degradation of Subunit c of ATP Synthase J. Ezaki, M. Takeda-Ezaki, and E. Komianami 509