

CONTENTS Vol. 139, No. 3

JB Minireview—Polyamines

- Diacetylated Derivatives of Spermine and Spermidine as Novel Promising Tumor Markers M. Kawakita and K. Hiramatsu 315

Rapid Communication

- Application of Lectin Microarray to Crude Samples: Differential Glycan Profiling of Lec Mutants Y. Ebe, A. Kuno, N. Uchiyama, S. Koseki-Kuno, M. Yamada, T. Sato, H. Narimatsu, and J. Hirabayashi 323

Regular Papers

- Lymphocyte Toxicity of Prion Fragments J. Murali and R. Jayakumar 329
- Novel Heparanase-Inhibiting Antibody Reduces Neointima Formation H.A. Myler, E.A. Lipke, E.E. Rice, and J.L. West 339
- Phylogeny of Vertebrate Src Tyrosine Kinases Revealed by the Epitope Region of mAb327 T. Iwasaki, K. Sato, K. Yoshino, S. Itakura, K. Kosuge, A.A. Tokmakov, K. Owada, K. Yonezawa, and Y. Fukami 347
- A Novel Sulfotransferase Abundantly Expressed in the Dauer Larvae of *Caenorhabditis elegans* K. Hattori, M. Inoue, T. Inoue, H. Arai, and H. Tamura 355
- Processing of Human Cathepsin D Is Independent of Its Catalytic Function and Auto-Activation: Involvement of Cathepsins L and B V. Laurent-Matha, D. Derocq, C. Prébois, N. Katunuma, and E. Liaudet-Coopman 363
- Up-Regulation of Heme Biosynthesis during Differentiation of Neuro2a Cells N. Shinjyo and K. Kita 373
- Characterization and Application of a Novel RNA Aptamer against the Mouse Prion Protein S. Sekiya, K. Noda, F. Nishikawa, T. Yokoyama, P.K.R. Kumar, and S. Nishikawa 383
- Loss of Core Fucosylation of Low-Density Lipoprotein Receptor-Related Protein-1 Impairs Its Function, Leading to the Upregulation of Serum Levels of Insulin-Like Growth Factor-Binding Protein 3 in *Fu8^{-/-}* Mice S.H. Lee, M. Takahashi, K. Honke, E. Miyoshi, D. Osumi, H. Sakiyama, A. Ekuni, X. Wang, S. Inoue, J. Gu, K. Kadomatsu, and N. Taniguchi 391
- Identification and Characterization of a Neutralizing Monoclonal Antibody for the Epitope on HM-1 Killer Toxin D. Selvakumar, Q.-Z. Zhang, M. Miyamoto, Y. Furuichi, and T. Komiyama 399
- Multiple Structural Transitions of the GroEL Subunit Are Sensitive to Intermolecular Interactions with Cochaperonin and Refolding Polypeptide T. Yoshimi, K. Hongo, T. Mizobata, and Y. Kawata 407
- Probing the Catalytic Center of Porcine Aminoacylase 1 by Site-Directed Mutagenesis, Homology Modeling and Substrate Docking Z. Liu, Z. Zhen, Z. Zuo, Y. Wu, A. Liu, Q. Yi, and W. Li 421
- Evaluation of the Dynamic Structure of DsrA RNA from *E. coli* and Its Functional Consequences K. Rolle, M. Zywicki, E. Wyszko, M.Z. Barciszewska, and J. Barciszewski 431
- Variation in the Divalent Cation Requirements of Influenza A Virus N1 Neuraminidases I.C. Brett and B.E. Johansson 439

Muscarinic Acetylcholine Receptors Stimulate Ca ²⁺ Influx in PC12D Cells Predominantly <i>via</i> Activation of Ca ²⁺ Store-Operated Channels	T. Ebihara, F. Guo, L. Zhang, J.Y. Kim, and D. Saffen	449
Muscarinic Acetylcholine Receptors Activate TRPC6 Channels in PC12D Cells <i>via</i> Ca ²⁺ Store-Independent Mechanisms	L. Zhang, F. Guo, J.Y. Kim, and D. Saffen	459
Freshwater Bioluminescence in <i>Vibrio albensis</i> (<i>Vibrio cholerae</i> biovar <i>albensis</i>) NCIMB 41 Is Caused by a Two-Nucleotide Deletion in <i>luxO</i>	S. Kasai	471
Identification of the Substrate Interaction Region of the Chitin-Binding Domain of <i>Streptomyces griseus</i> Chitinase C	K. Akagi, J. Watanabe, M. Hara, Y. Kezuka, E. Chikaishi, T. Yamaguchi, H. Akutsu, T. Nonaka, T. Watanabe, and T. Ikegami	483
Tannic Acid, a Potent Inhibitor of Epidermal Growth Factor Receptor Tyrosine Kinase	E.B. Yang, L. Wei, K. Zhang, Y.Z. Chen, and W.N. Chen	495
Distinct DNA Methylation Activity of Dnmt3a and Dnmt3b towards Naked and Nucleosomal DNA	H. Takeshima, I. Suetake, H. Shimahara, K. Ura, S. Tate, and S. Tajima	503
Cleavage of Amyloid- β Precursor Protein (APP) by Membrane-Type Matrix Metalloproteinases	M. Ahmad, T. Takino, H. Miyamori, T. Yoshizaki, M. Furukawa, and H. Sato	517
Binding of Steroidogenic Factor-1 to the Regulatory Region Might Not Be Critical for Transcriptional Regulation of the Human <i>CYP11B1</i> Gene	Y. Tsuchiya, M. Nakajima, S. Takagi, M. Katoh, W. Zheng, C.R. Jefcoate, and T. Yokoi	527
Acceptor Specificity of 4- α -Glucanotransferases of Mammalian Glycogen Debranching Enzymes	Y. Makino and K. Omichi	535
5-Oxo-Eicosatetraenoic Acid-Induced Chemotaxis: Identification of a Responsible Receptor hGPCR48 and Negative Regulation by G Protein G _{12/13}	D. Koike, H. Obinata, A. Yamamoto, S. Takeda, H. Komori, F. Nara, T. Izumi, and T. Haga	543
Kinetic Isotope Effect of the L-Phenylalanine Oxidase from <i>Pseudomonas</i> sp. P-501	Y. Ohta, E.B. Mukouyama, and H. Suzuki	551
Experimental Basis for a Stable Plasmid, pLS30, to Shuttle between <i>Bacillus subtilis</i> Species by Conjugational Transfer	N. Sakaya, S. Kaneko, S. Matsunaga, and M. Itaya	557
Peroxisome Proliferator-Activated Receptor Subtypes Differentially Cooperate with Other Transcription Factors in Selective Transactivation of the Perilipin/PEX11 α Gene Pair	M. Shimizu, M.H. Akter, Y. Emi, R. Sato, T. Yamaguchi, F. Hirose, and T. Osumi	563
Roles of Adjoining Asp and Cys Residues of First Matrix-Facing Loop in Transport Activity of Yeast and Bovine Mitochondrial ADP/ATP Carriers	Y. Kihira, M. Hashimoto, Y. Shinohara, E. Majima, and H. Terada	575
Pepstatin A, an Aspartic Proteinase Inhibitor, Suppresses RANKL-Induced Osteoclast Differentiation	H. Yoshida, K. Okamoto, T. Iwamoto, E. Sakai, K. Kanaoka, J.-P. Hu, M. Shibata, H. Hotokezaka, K. Nishishita, A. Mizuno, and Y. Kato	583
Catalytic Promiscuity in Dihydroxy-Acid Dehydratase from the Thermoacidophilic Archaeon <i>Sulfolobus solfataricus</i>	S. Kim and S.B. Lee	591
<i>Saccharomyces cerevisiae</i> Rot1p Is an ER-Localized Membrane Protein That May Function with BiP/Kar2p in Protein Folding	M. Takeuchi, Y. Kimata, A. Hirata, M. Oka, and K. Kohno	597

Identification and Characterization of Carbohydrate Molecules in Mammalian Cells Recognized by Dengue Virus Type 2	C. Aoki, K.I.P.J. Hidari, S. Itonori, A. Yamada, N. Takahashi, T. Kasama, F. Hasebe, M.A. Islam, K. Hatano, K. Matsuoka, T. Taki, C.-T. Guo, T. Takahashi, Y. Sakano, T. Suzuki, D. Miyamoto, M. Sugita, D. Terunuma, K. Morita, and Y. Suzuki	607
Thiolysis of Poly(3-hydroxybutyrate) with Polyhydroxyalkanoate Synthase from <i>Ralstonia eutropha</i>	K. Uchino and T. Saito	615