ARTICLES

Dominant-Negative Regulation of Cell Surface Expression by a Pentapeptide Motif at the Extreme COOH Terminus of an Slo1 Calcium-Activated Potassium Channel Splice Variant
Yu-Hsin Chiu, Claudia Alvarez-Baron, Eun Young Kim, and Stuart E. Dryer

Human Carboxylesterase 1 Stereoselectively Binds the Nerve Agent Cyclosarin and Spontaneously Hydrolyzes the Nerve Agent Sarin
Andrew C. Hemmert, Tamara C. Otto, Monika Wierdl, Carol C. Edwards, Christopher D. Fleming, Mary MacDonald, John R. Cashman, Philip M. Potter, Douglas M. Cerasoli, and Matthew R. Redinbo

Detergent-Resistant Microdomains Determine the Localization of α-1 Receptors to the Endoplasmic Reticulum-Mitochondria Junction
Teruo Hayashi and Michiko Fujimoto

Crystal Structure of a Cytochrome P450 2B6 Genetic Variant in Complex with the Inhibitor 4-(4-Chlorophenyl)imidazole at 2.0-Å Resolution
Sean C. Gay, Manish B. Shah, Jyothi C. Talakad, Keiko Maekawa, Arthur G. Roberts, P. Ross Wilderman, Ling Sun, Jane Y. Yang, Stephanie C. Huelga, Wen-Xu Hong, Qinghai Zhang, C. David Stout, and James R. Halpert

Site-Specific Fluorescence Reveals Distinct Structural Changes Induced in the Human ρ1 GABA Receptor by Inhibitory Neurosteroids
Ping Li, Alpa Khatri, John Bracamontes, David S. Weiss, Joe Henry Steinbach, and Gustav Akk

Identification of Determinants of Glucose-Dependent Insulinotropic Polypeptide Receptor That Interact with N-Terminal Biologically Active Region of the Natural Ligand
Tahir Yaqub, Irina G. Tikhonova, Jens Lättig, Remi Magnan, Marie Laval, Chantal Escrieurt, Cyril Boulégué, Chandralal Hewage, and Daniel Fourmy

Computer-Aided Discovery, Validation, and Mechanistic Characterization of Novel Neolignan Activators of Peroxisome Proliferator-Activated Receptor γ
Nanang Fakhrudin, Angela Ladurner, Atanas G. Atanasov, Elke H. Heiss, Lisa Baumgartner, Patrick Markt, Daniela Schuster, Ernst P. Ellmerer, Gerhard Wolber, Judith M. Rollinger, Hermann Stuppner, and Verena M. Dirsch

Pharmacological Analysis of Drosophila melanogaster γ-Secretase with Respect to Differential Proteolysis of Notch and APP
Casper Groth, W. Gregory Alvord, Octavio A. Quiñones, and Mark E. Fortini
Hepatic Heme-Regulated Inhibitor (HRI) Eukaryotic Initiation Factor 2α Kinase: A Protagonist of Heme-Mediated Translational Control of CYP2B Enzymes and a Modulator of Basal Endoplasmic Reticulum Stress Tone
Poulomi Acharya, Jane-Jane Chen, and Maria Almira Correia

A Thermally Stable Form of Bacterial Cocaine Esterase: A Potential Therapeutic Agent for Treatment of Cocaine Abuse

15-Deoxy-Δ12,14-Prostaglandin J2 Biphasically Regulates the Proliferation of Mouse Hippocampal Neural Progenitor Cells by Modulating the Redox State
Takashi Katura, Takahiro Moriya, and Norimichi Nakahata

A Dietary Agonist of Transient Receptor Potential Cation Channel V3 Elicits Endothelium-Dependent Vasodilation
Scott Earley, Albert L. Gonzales, and Zarine I. Garcia

Environmental Neurotoxic Pesticide Increases Histone Acetylation to Promote Apoptosis in Dopaminergic Neuronal Cells: Relevance to Epigenetic Mechanisms of Neurodegeneration
C. Song, A. Kanthasamy, V. Anantharam, F. Sun, and A. G. Kanthasamy

Role of Rad51 Down-Regulation and Extracellular Signal-Regulated Kinases 1 and 2 Inactivation in Emodin and Mitomycin C-Induced Synergistic Cytotoxicity in Human Non–Small-Cell Lung Cancer Cells
Ying-Jhen Su, Min-Shao Tsai, Ya-Hsun Kuo, Yu-Fan Chiu, Chao-Min Cheng, Szu-Ting Lin, and Yun-Wei Lin

Regulation of Multidrug Resistance Protein 1 by Tumor Necrosis Factor α in Cultured Glial Cells: Involvement of Nuclear Factor-κB and c-Jun N-Terminal Kinase Signaling Pathways
Patrick T. Ronaldson, Tamima Ashraf, and Reina Bendayan

Carbon Monoxide Releasing Molecule-2 Inhibits Pancreatic Stellate Cell Proliferation by Activating p38 Mitogen-Activated Protein Kinase/Heme Oxygenase-1 Signaling
Christian I. Schwer, Manuel Mutschler, Patrick Stoll, Ulrich Goebel, Matjaz Humar, Alexander Hoetzl, and Rene Schmidt

Multiple Affinity States of cGMP-Specific Phosphodiesterase for Sildenafil Inhibition Defined by cGMP-Dependent and cGMP-Independent Mechanisms
Irina G. Rybalkina, Xiao-Bo Tang, and Sergei D. Rybalkin

Antagonist Selective Modulation of Adenosine A1 and A3 Receptor Pharmacology by the Food Dye Brilliant Black BN: Evidence for Allosteric Interactions
L. T. May, S. J. Briddon, and S. J. Hill

Hepatic Clearance of Reactive Glucuronide Metabolites of Diclofenac in the Mouse Is Dependent on Multiple ATP-Binding Cassette Efflux Transporters
Jurjen S. Lagas, Rolf W. Sparidans, Els Wagenaar, Jos H. Beijnen, and Alfred H. Schinkel

σ1 Receptor Modulation of G-Protein-Coupled Receptor Signaling: Potentiation of Opioid Transduction Independent from Receptor Binding
Felix J. Kim, Ivanka Kovalyshyn, Maxim Burgman, Claire Neilan, Chih-Cheng Chien, and Gavril W. Pasternak

Sphingosine 1-Phosphate (SIP) Regulates Vascular Contraction via S1P3 Receptor: Investigation Based on a New S1P3 Receptor Antagonist
Akira Murakami, Hiroshi Takasugi, Shinya Ohnuma, Yuuki Koide, Atsuko Sakurai, Satoshi Takeda, Takeshi Hasegawa, Jun Sasanori, Takashi Konno, Kenji Hayashi, Yoshiaki Watanabe, Koji Mori, Yoshinichi Sato, Atsuo Takahashi, Naoki Mochizuki, and Nobuyuki Takakura

Supplemental material is available online at http://molpharm.aspetjournals.org.

About the cover: Ribbon-and-stick diagram depicting the G and H helices region in the 2B4 bifonazole, 1-(4-phenyl)benzylimidazole (1-PBI), and 4-CPI structures. See the article by Gay et al. on page 529 of this issue.