Contents

ACCELERATED COMMUNICATIONS

681 Structure and Properties of ω-Agatoxin IVB, a New Agonist of P-Type Calcium Channels
Michael E. Adams, Isabelle M. Mintz, Michael D. Reily, Venkataraman Thanabal, and Bruce P. Bean

689 Calcium Entry via L-Type Calcium Channels Acts as a Negative Regulator of Adenylyl Cyclase Activity and Cyclic AMP Levels in Cardiac Myocytes
Hai Jing Yu, Hui Ma, and Richard D. Green

694 Human Immunodeficiency Virus Type 1 Drug-Resistance Patterns with Different 1-{(2-Hydroxyethoxy)methyl}6-(phenylthio)thymine Derivatives
Jan Balzarini, Anna Karlsson, and Eric De Clercq

702 Anti-Human Immunodeficiency Virus Type 1 Therapy and Peripheral Neuropathy: Prevention of 2',3'-Dideoxycytidine Toxicity in PC12 Cells, a Neuronal Model, by Uridine and Pyruvate
Sue A. Keilbaugh, Gregory A. Hobbs, and Melvin V. Simpson

ARTICLES

707 Cytokines Down-regulate Expression of Major Cytochrome P-450 Enzymes in Adult Human Hepatocytes in Primary Culture
Ziad Abdel-Razzak, Pascal Loyer, Alain Fautrel, Jean-Charles Gautier, Laurent Corcos, Bruno Turlin, Philippe Beaune, and André Guillouzo

716 Drosophila Nervous System Muscarinic Acetylcholine Receptor: Transient Functional Expression and Localization by Immunochemistry
A. D. Blake, N. M. Anthony, H. H. Chen, J. B. Harrison, N. M. Nathanson, and D. B. Sattelle

725 5-Hydroxytryptamine1C Receptor Density and mRNA Levels in Choroid Plexus Epithelial Cells after Treatment with Mianserin and (−)-1-(4-Bromo-2,5-dimethoxyphenyl)-2-aminopropane
Eric L. Barker and Elaine Sanders-Bush

Continued
Modification of G Protein-Coupled Functions by Low-pH Pretreatment of Membranes from NG108-15 Cells: Increase in Opioid Agonist Efficacy by Decreased Inactivation of G Proteins

Dana E. Selley, Christopher S. Breivogel, and Steven R. Childers

Biochemical and Immunochemical Comparison of Saxiphilin and Transferrin, Two Structurally Related Plasma Proteins from Rana catesbeiana

Yi Li, Lyndon Llewellyn, and Edward Moczydlowski

β-[H]Funaltrexamine-Labeled μ-Opioid Receptors: Species Variation in Molecular Mass and Glycosylation by Complex-Type, N-Linked Oligosaccharides

Lee-Yuan Liu-Chen, Chongguang Chen, and Catherine A. Phillips

Spongistatin 1, A Highly Cytotoxic, Sponge-Derived, Marine Natural Product that Inhibits Mitosis, Microtubule Assembly, and the Binding of Vinblastine to Tubulin

Ruoli Bai, Zbigniew A. Cichacz, Cherry L. Herald, George R. Pettit, and Ernest Hamel

Dual Topoisomerase I and II Inhibition by Intoplicine (RP-60475), a New Antitumor Agent in Early Clinical Trials

Bruno Poddevin, Jean-François Riou, Francois Lavelle, and Yves Pommier

The Phenobarbital-Induced Transcriptional Activation of Cytochrome P-450 Genes Is Blocked by the Glucocorticoid-Progesterone Antagonist RU486

Peter M. Shaw, Milton Adesnik, Mary C. Weiss, and Laurent Corcos

Coupling of the Expressed α1B- and α1D-Adrenergic Receptors to Multiple Signalling Pathways Is Both G Protein and Cell-Type Specific

Dianne M. Perez, Mary Beth DeYoung, and Robert M. Graham

Antisera Against Peptides Derived from a Purified μ-Opioid Binding Protein Recognize the Protein as Well as μ-Opioid Receptors in Brain Regions and a Cell Line


Selective Coupling of α2-Adrenergic Receptor Subtypes to Cyclic AMP-Dependent Reporter Gene Expression in Transiently Transfected JEG-3 Cells

David J. Pepperl and John W. Regan

Inositol-1,3,4,5-tetrakisphosphate Induces Calcium Mobilization via the Inositol-1,4,5-trisphosphate Receptor in SH-SY5Y Neuroblastoma Cells

Robert A. Wilcox, R. A. John Challiss, Changsheng Liu, Barry V. L. Potter, and Stefan R. Nahorski

Indirect Inhibition by Bradykinin of Cyclic AMP Generation in Isolated Rat Glomeruli and Mesangial Cells

Jean-Loup Bascands, Christiane Pecher, and Jean-Pierre Girolami

BW373U86: A Nonpeptidic δ-Opioid Agonist with Novel Receptor-G Protein-Mediated Actions in Rat Brain Membranes and Neuroblastoma Cells

Steven R. Childers, Lynne M. Fleming, Dana E. Selley, Robert W. McNutt, and Kwen-Jen Chang

Continued
CONTENTS (cont'd)

835 A Selective Adenosine Antagonist (8-Cyclopentyl-1,3-dipropylxanthine) Eliminates Both Neuromuscular Depression and the Action of Exogenous Adenosine by an Effect on A1 Receptors

R. Sanger Redman and E. M. Silinsky

841 Discovery of a Novel Class of Neuromedin B Receptor Antagonists, Substituted Somatostatin Analогues


851 Ifenprodil Discriminates Subtypes of the N-Methyl-D-aspartate Receptor: Selectivity and Mechanisms at Recombinant Heteromeric Receptors

Keith Williams

860 U-93631 Causes Rapid Decay of γ-Aminobutyric Acid-Induced Chloride Currents in Recombinant Rat γ-Aminobutyric Acid Type A Receptors

Glenn H. Dillon, Haesook K. Im, Beverly J. Hamilton, Donald B. Carter, Ronald B. Gammill, Thomas M. Judge, and Wha Bin Im

866 Potentiation of γ-Aminobutyric Acid-Induced Chloride Currents by Various Benzodiazepine Site Agonists with the α1γ2, β2γ2 and α1β2γ2 Subtypes of Cloned γ-Aminobutyric Acid Type A Receptors

Haesook K. Im, Wha Bin Im, Beverly J. Hamilton, Donald B. Carter, and Philip F. Vonvoigtlander

871 Ethanol Inhibits a Neuronal ATP-Gated Ion Channel

Chaoying Li, Luis Aguayo, Robert W. Peoples, and Forrest F. Weight

876 Zinc Selectively Inhibits Flux through Benzodiazepine-Insensitive γ-Aminobutyric Acid Chloride Channels in Cortical and Cerebellar Microsacs

M. Frances Davies, Patricia A. Maguire, and Gilda H. Loew

882 Role of Threonine$^{342}$ in Helix 7 of the 5-Hydroxytryptamine Type 1D Receptor in Ligand Binding: An Indirect Mechanism for Receptor Selectivity

Alex Smolyar and Roman Osman

886 New Activation Model for the Histamine H2 Receptor, Explaining the Activity of the Different Classes of Histamine H2 Receptor Agonists

John C. Eriks, Henk van der Goot, and Hendrik Timmerman

895 Selective and Synergistic Inhibition of Human Immunodeficiency Virus Type 1 Reverse Transcriptase by a Non-nucleoside Inhibitor, MKC-442

Satoshi Yuasa, Yasuyo Sadakata, Hideaki Takashima, Kouichi Sekiya, Naoko Inouye, Masaru Ubasawa, and Masanori Baba

901 Chemical Properties of Carbonic Anhydrase IV, the Membrane-Bound Enzyme

Thomas H. Maren, George C. Wynns, and Per J. Wistrand