CONTENTS

ACCELERATED COMMUNICATIONS

CAROLYN S. RABE AND BORIS TABAKOFF. Glycine Site-Directed Agonists Reverse the Actions of Ethanol at the N-Methyl-D-aspartate Receptor 753

MOHAMED BOUTJDIR, PIERRE-FRANÇOIS MÉRY, RÉMY HanF, ALVIN SHRIER, AND RODOLPHE FISCHMEISTER. High Affinity Forskolin Inhibition of L-Type Ca²⁺ Current in Cardiac Cells 758

ROBERTO FERNANDEZ-LARSSON AND JEAN L. PATTERSON. Ribavirin Is an Inhibitor of Human Immunodeficiency Virus Reverse Transcriptase 766


ARTICLES

DAVID BLEAKMAN, STANLEY A. THAYER, STEVEN R. GLAUM, AND RICHARD J. MILLER. Bradykinin-Induced Modulation of Calcium Signals in Rat Dorsal Root Ganglion Neurons In Vitro 785

DOUGLAS A. WEIDNER AND JEAN-PIERRE SOMMADASSI. 3'-Azido-3'-deoxythymidine Inhibits Globin Gene Transcription in Butyric Acid-Induced K-562 Human Leukemia Cells 797

SEBASTIAN LAZARENO, NOEL J. BUCKLEY, AND FIONA F. ROBERTS. Characterization of Muscarinic M₂ Binding Sites in Rabbit Lung, Chicken Heart, and NG108-15 Cells . 805

J.-L. BuEB, M. MOUSLI, C. BRONNER, B. ROUOT, AND Y. LANDRY. Activation of G₁-Like Proteins, a Receptor-Independent Effect of Kinins in Mast Cells 816

NANCY J. LEIDENHEIMER, MICHAEL D. BROWNING, THOMAS V. DUNWIDDE, LISA D. HAHNER, AND R. ADRON HARRIS. Phosphorylation-Independent Effects of Second Messenger System Modulators on γ-Aminobutyric Acid, Receptor Complex Function 823

TERRY D. LINDSTROM, BRENDA R. HANSSEN, AND ALISON M. BENEDELE. Effects of Hepatic Ischemia-Reperfusion Injury on the Hepatic Mixed Function Oxidase System in Rats 829

JAMES F. KACHUR, BONNIE L. STURM, TIMOTHY S. GAGINELLA, AND LALITA NORONHA-BLOB. Regulation of Guinea Pig Ileal Electrolyte Transport by M₃-Muscarinic Acetylcholine Receptors In Vitro 836

GAËTAN GUILLEMETTE, ISABELLE FAVREAU, GUYLAIN BOULAY, AND MICHEL POTIER. Solubilization and Partial Characterization of Inositol 1,4,5-Trisphosphate Receptor of Bovine Adrenal Cortex Reveal Similarities with the Receptor of Rat Cerebellum 841

MARK BUSHFIELD, ILANA SHOSHANI, AND ROGER A. JOHNSON. Tissue Levels, Source, and Regulation of 3′-AMP: An Intracellular Inhibitor of Adenylyl Cyclases 848


Continued
CONTENTS (cont'd)

ENRIQUE L. M. OCHOA, LIAN LI, ALLEN PLUMMER AND MARK G. MCNAMEE. Direct Effects of Thymopentin (Arg-Lys-Asp-Val-Tyr) on Cholinergic Agonist-Induced Slow Inactivation of Nicotinic Acetylcholine Receptor Function .................................................. 863

JÜRGEN WESS, TOM I. BONNER, AND MARK R. BRANN. Chimeric m2/m3 Muscarinic Receptors: Role of Carboxyl Terminal Receptor Domains in Selectivity of Ligand Binding and Coupling to Phosphoinositide Hydrolysis .............................................. 872

LAWRENCE P. REAGAN, XUEHAI YE, RUBINA MIR, LOUIS R. DEPALO, AND STEVEN J. FLUHARTY. Up-regulation of Angiotensin II Receptors by In Vitro Differentiation of Murine N1E-115 Neuroblastoma Cells ...................................................... 878

RONALD J. LUKAS, TAPAN AUDHYA, GIDEON GOLDSTEIN, AND LINDA LUCERO. Interactions of the Thymic Polypeptide Hormone Thymopoietin with Neuronal Nicotinic \(\alpha\)-Bungarotoxin Binding Sites and with Muscle-Type, But Not Ganglia-Type, Nicotinic Acetylcholine Receptor Ligand-Gated Ion Channels .................................................. 887

JINGRU HU AND ESAM E. EL-Fakahany. Selectivity of McN-A-343 in Stimulating Phosphoinositide Hydrolysis Mediated by \(M_1\) Muscarinic Receptors .................................................. 895

CHRISTIAN FRELIN, PAUL VIGNE, AND JEAN-PHILIPPE BREITTMAYER. Mechanism of the Cardiotoxic Action of Palytoxin .................................................. 904


LUANN ROSENTHAL, DANIELE ZACCHETTI, LUISA MADEDDU, AND JACOPO MELDOLESI. Mode of Action of \(\alpha\)-Latrotoxin: Role of Divalent Cations in \(Ca^{2+}\)-Dependent and \(Ca^{2+}\)-Independent Effects Mediated by the Toxin .................................................. 917

HENRY I. MOSBERG, DEBORAH L. HEYL, RONALD C. HAASETH, JOHN R. OMAAS, FEDOR MEDZIHRADSKY, AND CHARLES B. SMITH. Cyclic Dermorphin-Like Tetrapeptides with \(\delta\)-Opioid Receptor Selectivity. 3. Effect of Residue 3 Modification on In Vitro Opioid Activity .................................................. 924

ZHOU ZHU, RAYMOND F. SCHINAZI, CHUNG K. CHU, GARY J. WILLIAMS, C. BUDD COLBY, AND JEAN-PIERRE SOMMADOSSI. Cellular Metabolism of 3'-Azido-2',3'-Dideoxy- yuridine with Formation of 5'-O-Diphosphohexose Derivatives by Previously Unrecognized Metabolic Pathways for 2'-Deoxyuridine Analogs .................................................. 929

ROBERT F. BRUNS AND JAMES H. FERGUS. Allosteric Enhancement of Adenosine A1 Receptor Binding and Function by 2-Amino-3-benzoylthiophenes .......................... 939

ROBERT F. BRUNS, JAMES H. FERGUS, LINDA L. COUGHENOUR, GENEVA G. COURTLAND, THOMAS A. PUGSLEY, JOHN H. DODD, AND FRANCIS J. TINNEY. Structure-Activity Relationships for Enhancement of Adenosine A1 Receptor Binding by 2-Amino-3-benzoylthiophenes .................................................. 950

Continued

IMPORTANT ANNOUNCEMENT

On October 1, 1990, Dr. T. Kendall Harden became the new Editor-in-Chief of Molecular Pharmacology, and the editorial office moved to Chapel Hill, North Carolina. After October 1, 1990, all new manuscripts should be submitted to him at the address below:

T. Kendall Harden
Molecular Pharmacology
CB 7368, Department of Pharmacology
University of North Carolina School of Medicine
Chapel Hill, NC 27599-7368

The Seattle office will handle the entire review of manuscripts submitted before October 1, 1990, including consideration of revisions submitted subsequently.