Contents

ASPET MEETING REPORT

399  Multiple Cyclic Nucleotide Phosphodiesterases   Joseph A. Beavo, Marco Conti, and Richard J. Heaslip

ARTICLES

406  Rapid Heterologous Desensitization of Muscarinic and Thrombin Receptor-Mediated Phospholipase D Activation   Maria Nieto, Eleanor Kennedy, David Goldstein, and Joan Heller Brown

414  The Rat Homologue of the Bovine \( \alpha_{1C} \)-Adrenergic Receptor Shows the Pharmacological Properties of the Classical \( \alpha_{1A} \) Subtype   Thomas M. Laz, Carlos Forray, Kelli E. Smith, Jonathan A. Bard, Pierre J.-J. Vaysse, Theresa A. Branchek, and Richard L. Weinshank

ANNOUNCEMENT

Effective January 1, 1995 all manuscripts for submission to MOLECULAR PHARMACOLOGY should be sent to:

Dr. Raymond J. Dingledine, Editor
Molecular Pharmacology
Emory University School of Medicine
5001 Rollins Research Center
Clifton Road
Atlanta, Georgia 30322-3090, U.S.A.
CONTENTS (cont’d)

423 Occurrence and Activation of Ca\textsuperscript{2+}/Calmodulin-Dependent Protein Kinase II and Its Endogenous Substrates in Bovine Adrenal Medullary Cells

431 A Cisplatin-Resistant Murine Leukemia Cell Line Exhibits Increased Topoisomerase II Activity

437 Modulation of Platelet-Derived Growth Factor-\beta mRNA Expression and Cell Growth in a Human Mesothelioma Cell Line by a Hammerhead Ribozyme

445 Differential Modulation of Human Fibroblast and Keratinocyte Growth by the Protein Kinase C Inhibitor GF 109203X

452 Genetic Analysis of the Chinese Cytochrome P4502D Locus: Characterization of Variant CYP2D6 Genes Present in Subjects with Diminished Capacity for Debrisoquine Hydroxylation

460 Dual Signaling Potential Is Common among Gs-coupled Receptors and Is Dependent on Receptor Density

470 Deletion Mutation in the Putative Third Intracellular Loop of the Rat Neurotensin Receptor Abolishes Polyphosphoinositide Hydrolysis but Not Cyclic AMP Formation in CHO-K1 Cells

477 Signal Transduction Differences between 5-Hydroxytryptamine Type 2A and Type 2C Receptor Systems

485 Endothelin Receptor Type A Signals Both the Accumulation of Inositol Phosphates and the Inhibition of Cyclic AMP Generation in Rat Myometrium: Stimulation and Desensitization

495 Internalization of the Gastrin-Releasing Peptide Receptor is Mediated by both Phospholipase C-Dependent and -Independent Processes

502 Many Agonists Induce “Quantal” Ca\textsuperscript{2+} Release or Adaptive Behavior in Muscle Ryanodine Receptors

508 Does General Anesthetic-Induced Desensitization of the Torpedo Acetylcholine Receptor Correlate with Lipid Disordering?

continued
CONTENTS (cont'd)

516 Cannabinoid Receptor Binding and Agonist Activity of Amides and Esters of Arachidonic Acid
Julia C. Pinto, Frederike Potié, Kenner C. Rice, Daniel Boring, M. Ross Johnson, David M. Evans, Gerald H. Wilken, Catherine H. Cantrell, and Allyn C. Howlett

523 Nicotine-Induced Increase in Neuronal Nicotinic Receptors Results from a Decrease in the Rate of Receptor Turnover
Xiao Peng, Volodymyr Gerzanich, René Anand, Paul J. Whiting, and Jon Lindstrom

531 Subunit-Specific Potentiation of Recombinant N-Methyl-d-Aspartate Receptors by Histamine
Keith Williams

542 Phosphorylation Factors Control Neurotransmitter and Neurmodulator Actions at the γ-Aminobutyric Acid Type A Receptor
Miklos Gyenes, Qiang Wang, Terrell T. Gibbs, and David H. Farb

550 Stable Expression of a Neuronal γ-Aminobutyric Acid Transporter, GAT-3, in Mammalian Cells Demonstrates Unique Pharmacological Properties and Ion Dependence
Janet A. Clark and Susan G. Amara

558 Pharmacological Discrimination Between γ-Aminobutyric Acid Type B Receptors Regulating Cholecystokinin and Somatostatin Release from Rat Neocortex Synaptosomes
Anita Gemignani, Paolo Paudice, Giambattista Bonanno, and Maurizio Raiteri

563 Epoxide Metabolite of Quinine and Inhibition of the Multidrug Resistance Pump in Human Leukemic Lymphoblasts
Paul W. Wigler, Kathleen L. Lyon, Frances K. Patterson, Anthony J. LaLoggia, Hernando Diaz-Araúzo, M. Sreenivasa Reddy, and James M. Cook

568 Bufuralol Hydroxylation by Cytochrome P450 2D6 and 1A2 Enzymes in Human Liver Microsomes
Hiroshi Yamazaki, Zuyu Guo, Magnus Persmark, Mayumi Mimura, Kiyoshi Inoue, F. Peter Guengerich, and Tsutomu Shimada

578 Specificity and Directionality of Thiol Effects on Sinusoidal Glutathione Transport in Rat Liver
Shelly C. Lu, John Kuhlenkamp, Jun-Li Ge, Wei-Min Sun, and Neil Kaplowitz