Contents

ACCELERATED COMMUNICATIONS

175 Novel Amiloride Analog Allosterically Modulates the $\alpha_2$-Adrenergic Receptor but Does Not Inhibit Na$^+$/H$^+$ Exchange
Amy L. Wilson, Scott W. Womble, Chandra Prakash, E. J. Cragoe, Jr., Ian A. Blair, and Lee E. Limbird

180 Human Gene S31 Encodes the Pharmacologically Defined Serotonin 5-Hydroxytryptamine$_{1B}$ Receptor
John M. Zgombick, Lee E. Schechter, Mary Macchi, Paul R. Hartig, Theresa A. Branchek, and Richard L. Weinshank

186 Action of Thrombin Receptor Polypeptide in Gastric Smooth Muscle: Identification of a Core Pentapeptide Retaining Full Thrombin-Mimetic Intrinsic Activity
Morley D. Hollenberg, Song-Gui Yang, Adebayo A. Laniyonu, Graham J. Moore, and Mahmoud Saifeddine

192 Metabotropic Glutamate Receptors Potentiate Ionotropic Glutamate Responses in the Rat Dorsal Horn
David Bleakman, Konstantin I. Rusin, Paul S. Chard, Steven R. Glaum, and Richard J. Miller

197 Immortalized Hypothalamic GT1–7 Neurons Express Functional $\gamma$-Aminobutyric Acid Type A Receptors
Tim G. Hales, Helen Kim, Biancamaria Longoni, Richard W. Olsen, and Allan J. Tobin

ARTICLES

203 Biochemical Characterization of Kainate Receptors from Goldfish Brain
Cynthia J. Ziegra, James M. Willard, and Robert E. Oswald

210 $N$-Methyl-$d$-aspartate Exposure Blocks Glutamate Toxicity in Cultured Cerebellar Granule Cells
De-Maw Chuang, Xiao-Ming Gao, and Steven M. Paul

Continued
CONTENTS (cont'd)

217  Association of Solubilized Angiotensin II Receptors with Phospholipase C-α in Murine Neuroblastoma NIE-115 Cells  Stephanie J. Mah, Anne M. Ades, Rubina Mir, Ivo R. Siemens, John R. Williamson, and Steven J. Fluharty

227  Histamine Increases Cytosolic Ca\(^{2+}\) in Dibutyryl-cAMP-Differentiated HL-60 Cells via H\(_1\) Receptors and Is an Incomplete Secretagogue  Roland Seifert, Ariane Höer, Stefan Offermanns, Armin Buschauer, and Walter Schunack

235  Histamine Increases Cytosolic Ca\(^{2+}\) in HL-60 Promyelocytes Predominantly via H\(_2\) Receptors with an Unique Agonist/Antagonist Profile and Induces Functional Differentiation  Roland Seifert, Ariane Höer, Ingo Schwaner, and Armin Buschauer

242  A Naturally Occurring Tyrosine to Histidine Replacement at Residue 33 of Human Thymidylate Synthase Confers Resistance to 5-Fluoro-2'-deoxyuridine in Mammalian and Bacterial Cells  Karen W. Barbour, Diana K. Hoganson, Sondra H. Berger, and Franklin G. Berger

249  Null Phenotype for Cytochrome P450 2B2 in the Rat Results from a Deletion of Its Structural Gene  Curtis J. Omiecinski, Richard Ramsden, Arfaan Rampersaud, and Frederick G. Walz, Jr.

257  Sequence Analysis, In Vitro Translation, and Expression of the cDNA for Rat Liver Minoxidil Sulfotransferase  Sharon J. Hirsh, Thomas P. Dooley, Ilene M. Reardon, Robert L. Heinrikson, and Charles N. Falany


273  Transcriptional Regulation of Rat Microsomal Epoxide Hydrolase Gene by Imidazole Antimycotic Agents  Sang Geon Kim

280  Anti-liver Microsomes Autoantibodies and Dihydralazine-Induced Hepatitis: Specificity of Autoantibodies and Inductive Capacity of the Drug  Mohammed Bourdi, Jean-Charles Gautier, Jasmina Mircheva, Dominique Larrey, Andre Guillouzo, Chantal Andre, Claire Bello, and Philippe H. Beaune

286  Two Binding Sites on Angiotensin-Converting Enzyme: Evidence from Radioligand Binding Studies  Rose B. Perich, Bruce Jackson, Fraser Rogerson, Frederick A. O. Mendelsohn, Donna Paxton, and Colin I. Johnston

294  Characterization of Functional Interactions of Imidazoquinoxaline Derivatives with Benzodiazepine-\(\gamma\)-Aminobutyric Acid\(_A\) Receptors  James D. Petke, Haesook K. Im, Wha Bin Im, David P. Blakeman, Jeff F. Pregenzer, E. Jon Jacobsen, Beverly J. Hamilton, and Donald B. Carter

302  Role of Ornithine Decarboxylase Suppression and Polyamine Depletion in the Antiproliferative Activity of Polyamine Analogs  Lucy Ghoda, Hirak S. Basu, Carl W. Porter, Laurence J. Marton, and Philip Coffino

Continued
CONTENTS (cont’d)

307 Evidence for the Stereoselective Inhibition of Chick Embryo Hepatic Ferrochelatase by N-Alkylated Porphyrins. II  
S. M. Kimmett, R. A. Whitney, and G. S. Marks

311 Complex Allosteric Modulation of Cardiac Muscarinic Receptors by Protamine: Potential Model for Putative Endogenous Ligands  
Jingru Hu, Shou-Zhen Wang, Carlos Forray, and Esam E. El-Fakahany

322 Both Enantiomers of 1-Aminocyclopentyl-1,3-dicarboxylate Are Full Agonists of Metabotropic Glutamate Receptors Coupled to Phospholipase C  
Olivier Manzoni, Laurent Prezeau, Francois A. Rassendren, Fritz Sladeczek, Ken Curry, and Joel Bockaert

328 Molecular Pharmacological Differences in the Interaction of Serotonin with 5-Hydroxytryptamine_{1C} and 5-Hydroxytryptamine_{2} Receptors  
Sigrun Leonhardt, Elena Gorospe, Beth J. Hoffman, and Milt Teitler

336 Identification of Endothelin Receptor Subtypes in Rat Kidney Cortex using Subtype-Selective Ligands  
Ponnal Nambi, Hsiao Ling Wu, Mark Pullen, Nambi Aiyar, Heidemarie Bryan, and John Elliott

340 Cyclic AMP Potentiates Receptor-Stimulated Phosphoinositide Hydrolysis in Human Neuroepithelioma Cells  

347 Receptor Occupancy and Adenylate Cyclase Activation in AR 4-2J Rat Pancreatic Acinar Cell Membranes by Analogs of Pituitary Adenylate Cyclase-Activating Peptides Amino-Terminally Shortened or Modified in Position 1, 2, 3, 20, or 21  
Patrick Robberecht, Philippe Gourlet, Philippe De Neef, Marie-Claire Woussen-Colle, Marie-Claire Vandermeers-Piret, André Vandermeers, and Jean Christophe

356 Effects of Oxidizing and Reducing Analogs of Acetylcholine on Neuronal Nicotinic Receptors  
Yu Xie, Gerald S. Jones, Jr., and Ralph H. Loring

364 Preferential Block of T-type Calcium Channels by Neuroleptics in Neural Crest-Derived Rat and Human C Cell Lines  
John J. Enyeart, Bruce A. Biagi, and Boris Mlinar

373 Theoretical Studies on the Histamine H_{2} Receptor: Molecular Mechanism of Action of Antagonists  
Jesús Giraldo, Miguel Martín, Mercedes Campillo, and Leonardo Pardo