MOLECULAR PHARMACOLOGY

Contents

ACCELERATED COMMUNICATIONS

313  Mouse 5-Hydroxytryptamine$_{5A}$ and 5-Hydroxytryptamine$_{5B}$ Receptors Define a New Family of Serotonin Receptors: Cloning, Functional Expression, and Chromosomal Localization

Hans Matthes, Ursula Boschert, Nourdine Amlaiky, Régis Grailhe, Jean-Luc Plassat, Françoise Muscatelli, Marie-Geneviève Mattei, and René Hen

320  Cloning and Expression of a Novel Serotonin Receptor with High Affinity for Tricyclic Psychotropic Drugs

Frederick J. Monsma, Jr., Yong Shen, Raymond P. Ward, Mark W. Hamblin, and David R. Sibley

ARTICLES

328  Expression of Multiple Forms of Cytochrome P450 mRNAs in Primary Cultures of Rat Hepatocytes Maintained on Matrigel

Thomas A. Kocarek, Erin G. Schuetz, and Philip S. Guzelian

335  N-Hydroxylation of Benzamidine to Benzamidoxime by a Reconstituted Cytochrome P-450 Oxidase System from Rabbit Liver: Involvement of Cytochrome P-450 IIC3

Bernd Clement, Frank Jung, and Hagen Pfunder

343  Lack of $\beta_3$-Adrenergic Receptor mRNA Expression in Adipose and Other Metabolic Tissues in the Adult Human

Ronald F. Thomas and Stephen B. Liggett

349  Paradoxical Increase of 5-Hydroxytryptamine$_{2A}$ Receptors and 5-Hydroxytryptamine$_{2C}$ Receptor mRNA in Cerbellar Granule Cells after Persistent 5-Hydroxytryptamine$_{2B}$ Receptor Stimulation

Jotaro Akiyoshi, Christopher Hough, and De-Maw Chuang

continued
CONTENTS (cont'd)

356  Presence of m3 Subtype Muscarinic Acetylcholine Receptors and Receptor-Mediated Increase in the Cytoplasmic Concentration of Ca2+ in Jurkat, a Human Leukemic Helper T Lymphocyte Line  Toshio Kaneda, Yoshihisa Kitamura, and Yasuyuki Nomura

365  Histamine-Induced Production of Interleukin-1α from Murine Bone Marrow Stromal Cells and Its Inhibition by H2 Blockers  Kenji Tasaka, Mitsunobu Mio, Masamitsu Shimazawa, and Naoki Nakaya

372  Reversal of Resistance to Adriamycin by 8-Chloro-Cyclic AMP in Adriamycin-Resistant HL-60 Leukemia Cells Is Associated with Reduction of Type I Cyclic AMP-Dependent Protein Kinase and Cyclic AMP Response Element-Binding Protein DNA-Binding Activities  Christian Rohlff, Bauback Safa, Aquilur Rahman, Yoon Sang Cho-Chung, Raymond W. Klecker, and Robert I. Glazer

380  A First Step in the Development of Gene Therapy for Colorectal Carcinoma: Cloning, Sequencing, and Expression of Escherichia coli Cytosine Deaminase  Elizabeth A. Austin and Brian E. Huber

388  Further Characterization and Purification of the Flavin-Dependent S-Benzyl-L-cysteine S-Oxidase Activities of Rat Liver and Kidney Microsomes  Peter J. Sausen, Renee J. Duescher, and Adnan A. Elfarra

397  Analysis of Receptor-Mediated Activation of GTP-Binding Protein/Adenylate Cyclase using the Encounter Coupling Model  Douglas F. Stickle and Roger Barber

412  Human S31 Serotonin Receptor Clone Encodes a 5-Hydroxytryptamine1E-like Serotonin Receptor  Thomas Gudermann, Finn Olav Levy, Mariel Birnbaumer, Lutz Birnbaumer, and Alberto J. Kaumann

419  Pharmacological Characteristics of the Newly Cloned Rat 5-Hydroxytryptamine2F Receptor  David B. Wainscott, Marlene L. Cohen, Kathryn W. Schenck, James E. Audia, Jeffrey S. Nissen, Melvyn Baez, Jonathan D. Kursar, Virginia L. Lucaites, and David L. Nelson

427  Receptor Reserve Masks Partial Agonist Activity of Drugs in a Cloned Rat 5-Hydroxytryptamine1B Receptor Expression System  Nika Adham, Brenda Ellerbrock, Paul Hartig, Richard L. Weinshank, and Theresa Branchek


444  Characterization of α2-Adrenergic Receptor Subtype-Specific Antibodies  Hitoshi Kurose, Jeffrey L. Arriza, and Robert J. Lefkowitz

Continued
CONTENTS (cont’d)

451 Ca$^{2+}$ Inhibition of β-Adrenergic Receptor- and Forskolin-Stimulated cAMP Accumulation in C6-2B Rat Glioma Cells Is Independent of Protein Kinase C
Maria A. DeBernardi, Ravi Munshi, and Gary Brooker

459 Thiocyanate Equally Increases Affinity for Two dL-α-Amino-3-hydroxy-5-methylisoxazolepropionic Acid (AMPA) Receptor States
Randy A. Hall, Guy Massicotte, Markus Kessler, Michel Baudry, and Gary Lynch

465 Receptor Mechanisms of Opioid Tolerance in SH-SY5Y Human Neural Cells
Bruce D. Carter and Fedor Medzihradsky

474 Binding of the K$^+$ Channel Opener [3H]P1075 in Rat Isolated Aorta: Relationship to Functional Effects of Openers and Blockers
U. Quast, K. M. Bray, H. Andres, P. W. Manley, Y. Baumlin, and J. Dosogne

482 Modulation of Gating of Cloned Rat and Human K$^+$ Channels by Micromolar Zn$^{2+}$
N. L. Harrison, H. K. Radke, M. M. Tamkun, and D. M. Lovinger

487 Evidence of Stimulation of the γ-Aminobutyric Acid Shunt by Valproate and E-Δ2-Valproate in Neonatal Rat Brain
Juan P. Bolaños and José M. Medina

491 Cisplatin Inhibits In Vitro Translation by Preventing the Formation of Complete Initiation Complex
Jeffrey M. Rosenberg and Paul H. Sato