

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, Nouridine 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 β_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-Hydroxytryptamine₂ Receptors and 5-Hydroxytryptamine₂ Receptor mRNA in Cerebellar Granule Cells after Persistent 5-Hydroxytryptamine₂ Receptor Stimulation
Jotaro Akiyoshi, Christopher Hough, and De-Maw Chuang

continued

MOLECULAR PHARMACOLOGY (MOL/ISSN 0026-895X) is an official publication of The American Society for Pharmacology and Experimental Therapeutics and is published monthly, two volumes a year, beginning in January and July, by Williams & Wilkins, 428 E. Preston St., Baltimore, MD 21202-3993. Second class postage paid at Baltimore, MD and at additional mailing offices. POSTMASTER: Send address changes to MOLECULAR PHARMACOLOGY, 428 E. Preston St., Baltimore, MD 21202-3993. **Subscription Rates:** U.S.: *Personal* \$105; *Institutional* \$230; *Single copy* \$19. **Outside the U.S., except Japan:** *Personal* \$135; *Institutional* \$260; *Single copy* \$23. Foreign prices exclude Japan. **See Information for Subscribers for detailed instructions.** The GST Tax Number for Canadian subscribers is 123394371. **PRICES ARE SUBJECT TO CHANGE.** Indexed by *Index Medicus*, *Current Contents (Life Sciences)*, *Excerpta Medica*, and *Current Awareness in Biological Sciences*. Copyright © 1993 by The American Society for Pharmacology and Experimental Therapeutics.

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-1 α 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-Hydroxytryptamine_{1E}-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-Hydroxytryptamine_{2F} 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-Hydroxytryptamine_{1B} Receptor Expression System Nika Adham, Brenda Ellerbrock, Paul Hartig, Richard L. Weinshank, and Theresa Brancheck
- 434 Compartmentation of Receptors and Guanine Nucleotide-Binding Proteins in NG108-15 Cells: Lack of Cross-talk in Agonist Binding among the α_2 -Adrenergic, Muscarinic, and Opiate Receptors D'vorah Graeser and Richard R. Neubig
- 444 Characterization of α_2 -Adrenergic Receptor Subtype-Specific Antibodies Hitoshi Kurose, Jeffrey L. Arriza, and Robert J. Lefkowitz

Continued

CONTENTS (cont'd)

- | | | |
|-----|--|---|
| 451 | Ca²⁺ 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 Zn²⁺ | 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 <i>E</i>-Δ^2-Valproate in Neonatal Rat Brain | Juan P. Bolaños and José M. Medina |
| 491 | Cisplatin Inhibits <i>In Vitro</i> Translation by Preventing the Formation of Complete Initiation Complex | Jeffrey M. Rosenberg and Paul H. Sato |