

Contents

ARTICLES

- | | | |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| 1 | Site-Selective Photoaffinity Labeling of the <i>Torpedo californica</i> Nicotinic Acetylcholine Receptor by Azide Derivatives of Ethidium Bromide | Steen E. Pedersen |
| 10 | Expression and Characterization of Cloned Human Bombesin Receptors | Richard V. Benya, Takashi Kusui, Tapas K. Pradhan, James F. Battey, and Robert T. Jensen |
| 21 | A Ryanodine Receptor-like Ca ²⁺ Channel Is Expressed in Nonexcitable Cells | Fulvia Larini, Paola Menegazzi, Olavio Baricordi, Francesco Zorzato, and Susan Treves |
| 29 | Precipitated Morphine Withdrawal Stimulates Multiple Activator Protein-1 Signaling Pathways in the Rat Brain | Pastor Couceyro and James Douglass |
| 40 | Expression of the Bovine Striatal D ₂ Receptor, But Not the D ₁ Receptor, in Bovine Adrenal Medulla | Rosario Maroto, Manuela G. López, Mercedes del Valle, José R. Naranjo, Britt Mellström, and Antonio G. Garcia |
| 51 | Evidence for Transcriptional Control of Human <i>mdr1</i> Gene Expression by Verapamil in Multidrug-Resistant Leukemic Cells | C. Muller, F. Goubin, E. Ferrandis, I. Cornil-Scharwitz, J. D. Bailly, C. Bordier, J. Bénard, B. I. Sikic, and G. Laurent |
| 57 | Divergent Regulation of Cytochrome P450 Enzymes by Morphine and Pethidine: A Neuroendocrine Mechanism? | Anders Rane, Zhurong Liu, Colin J. Henderson, and C. Roland Wolf |
| 65 | Differential Effect of 2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin on the "Adipose-Type" and "Brain-Type" Glucose Transporters in Mice | Phillip C. C. Liu and Fumio Matsumura |

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. Country of origin USA. PRICES ARE SUBJECT TO CHANGE. Indexed by *Index Medicus*, *Current Contents (Life Sciences)*, *Excerpta Medica*, *Reference Update/Research Information Systems*, and *Current Awareness in Biological Sciences*. Copyright © 1995 by The American Society for Pharmacology and Experimental Therapeutics.

CONTENTS (cont'd)

- 74 Relationship of Cytochrome P450 Activity to Clara Cell Cytotoxicity. IV. Metabolism of Naphthalene and Naphthalene Oxide in Microdissected Airways from Mice, Rats, and Hamsters
Alan Buckpitt, Ai-Min Chang, Alison Weir, Laura Van Winkle, Xiuzhen Duan, Richard Philpot, and Charles Plopper
- 82 A Single Amino Acid Substitution in Somatostatin Receptor Subtype 5 Increases Affinity for Somatostatin-14
Bradley A. Ozenberger and John R. Hadcock
- 88 Probing of the Location of the Allosteric Site on m1 Muscarinic Receptors by Site-Directed Mutagenesis
Hideki Matsui, Sebastian Lazareno, and Nigel J. M. Birdsall
- 99 Identification of 5-Hydroxytryptamine₇ Receptor Binding Sites in the Rat Hypothalamus: Sensitivity to Chronic Antidepressant Treatment
Andrew J. Sleight, Catherine Carolo, Nadine Petit, Catherine Zwingelstein, and Anne Bourson
- 104 ADP and ATP Activate Distinct Signaling Pathways in Human Promonocytic U937 Cells Differentiated with 1,25-Dihydroxy-vitamin D₃
M. Angeles Ventura and Pierre Thomopoulos
- 115 Elucidation of the Insurmountable Nature of an Angiotensin Receptor Antagonist, SC-54629
Gillian M. Olins, Susan T. Chen, Ellen G. McMahon, Maria A. Palomo, and David B. Reitz
- 121 Channel Inhibition by Alkanols Occurs at a Binding Site on the Nicotinic Acetylcholine Receptor
Susan C. Wood, Peter H. Tonner, Alberto J. de Armendi, Birgitte Bugge, and Keith W. Miller
- 131 Characterization of Cloned Human Dopamine D1 Receptor-Mediated Calcium Release in 293 Cells
Chun Wel Lin, Thomas R. Miller, David G. Witte, Bruce R. Bianchi, Michael Stashko, Arlene M. Manelli, and Donald E. Frail
- 140 Glutamate-Induced Destabilization of Intracellular Calcium Concentration Homeostasis in Cultured Cerebellar Granule Cells: Role of Mitochondria in Calcium Buffering
Lech Kiedrowski and Erminio Costa
- 148 Functional Effects of Mutations in the Putative Agonist Binding Region of Recombinant α -Amino-3-hydroxy-5-methyl-4-isoxazolepropionic Acid Receptors
Feng Li, Neil Owens, and Todd A. Verdoorn
- 155 Receptor Binding Characterization in Kidney Membrane of [³H]U-37883, a Novel ATP-Sensitive K⁺ Channel Blocker with Diuretic/Natriuretic Properties
Kaushik Meisheri, Michel Fosset, Stephen Humphrey, and Michel Lazdunski
- 164 Characterization of a Series of Anabaseine-Derived Compounds Reveals That the 3-(4)-Dimethylaminocinnamylidene Derivative Is a Selective Agonist at Neuronal Nicotinic α 7/¹²⁵I α -Bungarotoxin Receptor Subtypes
Christopher M. de Fiebre, Edwin M. Meyer, Jeffrey C. Henry, Samuel I. Muraskin, William R. Kem, and Roger L. Papke

Continued

CONTENTS (cont'd)

- | | | |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| 172 | Agonist Selectivity for Three Species of Natriuretic Peptide Receptor-A | Jill R. Schoenfeld, Patricia Sehl, Clifford Quan, John P. Burnier, and David G. Lowe |
| 181 | Blockade of Multiple Human Cardiac Potassium Currents by the Antihistamine Terfenadine: Possible Mechanism for Terfenadine-Associated Cardiotoxicity | William J. Crumb, Jr., Barbara Wible, David J. Arnold, John P. Payne, and Arthur M. Brown |
| 191 | Cyclic AMP and Protein Kinase A Mediate 5-Hydroxytryptamine Type 4 Receptor Regulation of Calcium-Activated Potassium Current in Adult Hippocampal Neurons | Gonzalo E. Torres, Yves Chaput, and Rodrigo Andrade |
| 198 | Mechanism of Clofilium Block of the Human Kv1.5 Delayed Rectifier Potassium Channel | A. A. Malayev, D. J. Nelson, and L. H. Philipson |
| 206 | Structural Analogs of Interleukin-2: A Point Mutation that Facilitates Biological Response | David Z. Chang, Maria Luisa Tasayco, and Thomas L. Ciardelli |