

## CONTENTS

## ACCELERATED COMMUNICATIONS

- PASCAL LEGENDRE AND GARY L. WESTBROOK. Noncompetitive Inhibition of  $\gamma$ -Aminobutyric Acid<sub>A</sub> Channels by Zn ..... 267
- JUDY L. RAUCY, JEROME M. LASKER, JAMES C. KRANER, DANIEL E. SALAZAR, CHARLES S. LIEBER, AND GEORGE B. CORCORAN. Induction of Cytochrome P450IIE1 in the Obese Overfed Rat ..... 275
- PAULA BARONE CAFFREY AND GERALD D. FRENKEL. Inhibition of Cell Colony Formation by Selenite: Involvement of Glutathione ..... 281
- CHRISTINE E. DUSENBURY, MARY A. DAVIS, THEODORE S. LAWRENCE, AND JONATHAN MAYBAUM. Induction of Megabase DNA Fragments by 5-Fluorodeoxyuridine in Human Colorectal Tumor (HT29) Cells ..... 285

## ARTICLES

- KELLY M. STANDIFER, LEELAVATI R. MURTHY, KEIKO KINOCHI, LOREN STEELE, AND GAVRIL W. PASTERNAK. Affinity Labeling of  $\mu$  and  $\kappa$  Receptors with Naloxone Benzoylhydrazone ..... 290
- LYNN M. IWANIEC, JEFFREY J. KROLL, W. MAURICE ROETHEL, AND JONATHAN MAYBAUM. Selective Inhibition of Sequence-Specific Protein-DNA Interactions by Incorporation of 6-Thioguanine: Cleavage by Restriction Endonucleases ..... 299
- F. H. LIN, G. CLARK, L. S. BIRNBAUM, G. W. LUCIER, AND J. A. GOLDSTEIN. Influence of the *Ah* Locus on the Effects of 2,3,7,8-Tetrachlorodibenzo-*p*-dioxin on the Hepatic Epidermal Growth Factor Receptor ..... 307
- JÖRG HUWYLER, MARIA BÜRGIN, TANJA ZEUGIN, AND JOSEF GUT. Transformation of 5-Hydroperoxyeicosatetraenoic Acid Into Dihydroxy- and Cysteinyl-Leukotrienes by Rat Hepatocytes: Effects of Glutathione ..... 314
- M. QUIK, H. EL-BIZRI, T. AUDHYA, AND G. GOLDSTEIN. Thymopoietin, a Potent Antagonist at Nicotinic Receptors in C2 Muscle Cell Cultures ..... 324
- SUSAN C. WOOD, STUART A. FORMAN, AND KEITH W. MILLER. Short Chain and Long Chain Alkanols Have Different Sites of Action on Nicotinic Acetylcholine Receptor Channels from *Torpedo* ..... 332
- JOHN W. BOJA, M. ABDUR RAHMAN, ABRAHAM PHILIP, ANITA H. LEWIN, F. IVY CARROLL, AND MICHAEL J. KUCHAR. Isothiocyanate Derivatives of Cocaine: Irreversible Inhibition of Ligand Binding at the Dopamine Transporter ..... 339
- CHUN WEL LIN, KAZUMI SHIOSAKI, THOMAS R. MILLER, DAVID G. WITTE, BRUCE R. BIANCHI, CAROLINE A. W. WOLFRAM, HANA KOPECKA, RICHARD CRAIG, FRANK WAGENAAR, AND ALEX M. NADZAN. Characterization of Two Novel Cholecystokinin Tetrapeptide (30-33) Analogues, A-71623 and A-70874, That Exhibit High Potency and Selectivity for Cholecystokinin-A Receptors ..... 346

*Continued*

MOLECULAR PHARMACOLOGY (ISSN 0026-895x) is an official publication of The American Society for Pharmacology and Experimental Therapeutics and is published monthly by Williams & Wilkins, 428 East Preston Street, Baltimore, MD 21202-3993. Price per year: USA individual rate \$90; all other countries, surface mail \$120. USA institutional rate \$195, all other countries, surface mail \$225. Single copies \$17 (\$20 foreign). (Prices subject to change.) Indexed by *Index Medicus*, *Current Contents/Life Sciences*, *Excerpta Medica*, and *Current Awareness in Biological Sciences*. All subscription orders should be addressed to Molecular Pharmacology, 428 East Preston Street, Baltimore, MD 21202-3993.

Second Class Postage paid at Baltimore, MD, and at additional mailing offices. POSTMASTER: Send address changes to MOLECULAR PHARMACOLOGY, 428 East Preston Street, Baltimore, MD 21202-3993.

Copyright © 1991 by The American Society for Pharmacology and Experimental Therapeutics.

## CONTENTS (cont'd)

JILDA NETTLETON, NEIL A. CASTLE, AND GING KUO WANG. Block of Single Batrachotoxin-Activated Na <sup>+</sup> Channels by Clofilium .....	352
KAZUO MATSUMOTO AND ACHILLES J. PAPPANO. Carbachol Activates a Novel Sodium Current in Isolated Guinea Pig Ventricular Myocytes Via M <sub>2</sub> Muscarinic Receptors ..	359
ROBERT Y. KANTERMAN, LAWRENCE C. MAHAN, EILEEN M. BRILEY, FREDERICK J. MONSMA, JR., DAVID R. SIBLEY, JULIUS AXELROD, AND CHRISTIAN C. FELDER. Transfected D <sub>2</sub> Dopamine Receptors Mediate the Potentiation of Arachidonic Acid Release in Chinese Hamster Ovary Cells .....	364
ROCHELLE D. SCHWARTZ, GÜNTER HEUSCHNEIDER, PATRICIA P. EDGAR, AND JONATHAN A. COHN. cAMP Analogs Inhibit $\gamma$ -Aminobutyric Acid-Gated Chloride Flux and Activate Protein Kinase A in Brain Synaptoneurosomes .....	370
THEODORE J. TORPHY, HAN-LIANG ZHOU, MIRIAM BURMAN, AND LISA B. F. HUANG. Role of Cyclic Nucleotide Phosphodiesterase Isozymes in Intact Canine Trachealis ...	376
YOSSEF ITZHAK, DEBORAH MASH, SHE-HUI ZHANG, AND IRA STEIN. Characterization of N-Methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) Binding Sites in C57BL/6 Mouse Brain: Mutual Effects of Monoamine Oxidase Inhibitors and $\sigma$ Ligands on MPTP and $\sigma$ Binding Sites .....	385
WHA BIN IM AND DAVID P. BLAKEMAN. Correlation Between $\gamma$ -Aminobutyric Acid <sub>A</sub> Receptor Ligand-Induced Changes in <i>t</i> -Butylbicyclophosphoro[ <sup>35</sup> S]thionate Binding and <sup>36</sup> Cl <sup>-</sup> Uptake in Rat Cerebrocortical Membranes .....	394
ROBERT A. JOHNSON, LYNNETT J. ARNESON-ROTERT, JOANNE M. HOFFMAN, AND MYRON L. TOEWS. Serum-Induced Sensitization of Cyclic AMP Accumulation in 1321N1 Human Astrocytoma Cells .....	399
KARIN KLIJN, SANDRA R. SLIVKA, KELLY BELL, AND PAUL A. INSEL. Renal $\alpha_1$ -Adrenergic Receptor Subtypes: MDCK-D1 Cells, But Not Rat Cortical Membranes Possess a Single Population of Receptors .....	407
FREDERICK C. KAUFFMAN, MICHAEL WHITTAKER, IRENE ANUNDI, AND RONALD G. THURMAN. Futile Cycling of a Sulfate Conjugate By Isolated Hepatocytes .....	414
CATHERINE S. MURPHY, CHRISTOPHER J. PARKER, RAYMOND MCCAGUE, AND V. CRAIG JORDAN. Structure-Activity Relationships of Nonisomerizable Derivatives of Tamoxifen: Importance of Hydroxyl Group and Side Chain Positioning for Biological Activity	421

---

Copyright © 1991 by The American Society for Pharmacology and Experimental Therapeutics

All Rights Reserved

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the copyright owner.

The appearance of the code at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of this article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (21 Congress Street, Salem, Massachusetts 01970), for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Copy fees for pre-1986 articles are the same as those shown for current articles.