CONTENTS

ACCELERATED COMMUNICATIONS

ANNE W. SCHMIDT AND STEPHEN J. PEROUTKA. Three-Dimensional Steric Molecular Modeling of the 5-Hydroxytryptamine ₃ Receptor Pharmacophore	505
YOSSEF ITZHAK. Multiple Affinity Binding States of the σ Receptor: Effect of GTP-Binding Protein-Modifying Agents	512
Bertha K. Madras, Roger D. Spealman, Michele A. Fahey, John L. Neumeyer, Jaynaka K. Saha, and Richard A. Milius. Cocaine Receptors Labeled by $[^3H]2\beta$ -Carbomethoxy- 3β -(4-fluorophenyl)tropane	518
ARTICLES	
PETRUS J. PAUWELS, HARRIE P. VAN ASSOUW, JOSÉE E. LEYSEN, AND PAUL A. J. JANSSEN. Ca ²⁺ -Mediated Neuronal Death in Rat Brain Neuronal Cultures by Veratridine: Protection by Flunarizine	525
INEKE BRAAKMAN, OSCAR VEREST, TJAARD PIJNING, DIRK K. F. MEIJER, AND GENY M. M. GROOTHUIS. Zonal Distribution of the Cation Lucigenin in Rat Liver: Influence of Taurocholate	532
INEKE BRAAKMAN, TJAARD PIJNING, OSCAR VEREST, BETTY WEERT, DIRK K. F. MEIJER, AND GENY M. M. GROOTHUIS. Vesicular Uptake System for the Cation Lucigenin in the Rat Hepatocyte	537
BRIAN M. J. FOXWELL, ANDREW MACKIE, VICTOR LING, AND BERNHARD RYFFEL. Identification of the Multidrug Resistance-Related P-Glycoprotein as a Cyclosporine Binding Protein	543
FAUSTINO MOLLINEDO, JUAN M. NIETO, AND JOSE M. ANDREU. Cytoplasmic Microtubules in Human Neutrophil Degranulation: Reversible Inhibition by the Colchicine Analogue 2-Methoxy-5-(2',3',4'-trimethoxyphenyl)-2,4,6-cycloheptatrien-1-one	547
C. J. McBain, N. W. Kleckner, S. Wyrick, and R. Dingledine. Structural Requirements for Activation of the Glycine Coagonist Site of N-Methyl-D-aspartate Receptors Expressed in Xenopus Oocytes	556
KEITH R. JARVIE, GILLIAN BOOTH, EDWARD M. BROWN, AND HYMAN B. NIZNIK. Glycoprotein Nature of Dopamine D1 Receptors in the Brain and Parathyroid Gland	566
KEITH WILLIAMS, CARMELO ROMANO, AND PERRY B. MOLINOFF. Effects of Polyamines on the Binding of [3H]MK-801 to the N-Methyl-D-aspartate Receptor: Pharmacological Evidence for the Existence of a Polyamine Recognition Site	575
JOY A. UMBACH AND CAMERON B. GUNDERSEN. Mercuric Ions Are Potent Noncompetitive Antagonists of Human Brain Kainate Receptors Expressed in Xenopus Oocytes	582
H. O. VILLAR, E. T. UYENO, L. TOLL, W. POLGAR, M. F. DAVIES, AND G. H. LOEW. Molecular Determinants of Benzodiazepine Receptor Affinities and Anticonvulsant Activities	589
GABRIEL BERSTEIN, TATSUYA HAGA, AND ARATA ICHIYAMA. Effect of the Lipid Environment on the Differential Affinity of Purified Cerebral and Atrial Muscarinic Acetylcholine Receptors for Pirenzepine	601
S. A. McCluskey, R. A. Whitney, and G. S. Marks. Evidence for the Stereoselective Inhibition of Chick Embryo Hepatic Ferrochelatase by N-Alkylated Porphyrins	608
Conti	nued

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 \$80; Japan \$145 (includes air freight); all other countries, surface mail \$105. USA institutional rate \$175; Japan \$240 (includes air freight); all other countries, surface mail \$200. (Prices subject to change.) 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 © 1989 by The American Society for Pharmacology and Experimental Therapeutics.

DIMITRIOS L. KALPAXIS AND CHARALAMBOS COUTSOGEORGOPOULOS. Type of Inhibition of Peptide Bond Formation by Chloramphenicol Depends on the Temperature and the Concentration of Ammonium Ions	615
CYNTHIA J. HUMPHREYS, DAN CASSEL, AND GARY RUDNICK. 2-Iodoimipramine, a Novel Ligand for the Serotonin Transporter	620
CHRISTOPHER S. KONKOY AND STEVEN R. CHILDERS. Dynorphin-Selective Inhibition of Adenylyl Cyclase in Guinea Pig Cerebellum Membranes	627
R. Preston Mason, Simon F. Campbell, Shou-Dao Wang, and Leo G. Herbette. Comparison of Location and Binding for the Positively Charged 1,4-Dihydropyridine Calcium Channel Antagonist Amlodipine with Uncharged Drugs of this Class in Cardiac Membranes	634
STEPHEN B. LIGGETT, MICHEL BOUVIER, WILLIAM P. HAUSDORFF, BRIAN O'DOWD, MARC G. CARON, AND ROBERT J. LEFKOWITZ. Altered Patterns of Agonist-Stimulated cAMP Accumulation in Cells Expressing Mutant β_2 -Adrenergic Receptors Lacking Phosphorylation Sites	641
STEPHANIE RENS-DOMIANO, GLEN L. HORTIN, AND JEROME A. ROTH. Sulfation of tert-Butoxycarbonylcholecystokinin and Other Peptides by Rat Liver Tyrosylprotein Sulfotransferase	647
J. N. M. COMMANDEUR, F. J. J. DE KANTER, AND N. P. E. VERMEULEN. Bioactivation of the Cysteine-S-Conjugate and Mercapturic Acid of Tetrafluoroethylene to Acylating Reactive Intermediates in the Rat: Dependence of Activation and Deactivation Activities on Acetyl Coenzyme A Availability	654
PHILIP PALADE, CHRISTINE DETTBARN, POMPEO VOLPE, BARBARA ALDERSON, AND ANGELA S. OTERO. Direct Inhibition of Inositol-1,4,5-trisphosphate-Induced Ca ²⁺ Release from Brain Microsomes by K ⁺ Channel Blockers	664
PHILIP PALADE, CHRISTINE DETTBARN, BARBARA ALDERSON, AND POMPEO VOLPE. Pharmacologic Differentiation between Inositol-1,4,5-trisphosphate-Induced Ca ²⁺ Release and Ca ²⁺ - or Caffeine-Induced Ca ²⁺ Release from Intracellular Membrane Systems	673

Copyright © 1989 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.