

CONTENTS

SHORT COMMUNICATION

| | |
|--|-------|
| BOBBE L. FERRAILO AND JOHN J. MIEYAL. Subunit Selectivity in the Monooxygenase-Like Activity of Tetrameric Hemoglobin | 1 |
| <hr/> | |
| ANDRE DE LEAN, ARTHUR A. HANCOCK, AND ROBERT J. LEFKOWITZ. Validation and Statistical Analysis of a Computer Modeling Method for Quantitative Analysis of Radioligand Binding Data for Mixtures of Pharmacological Receptor Subtypes | 5 ✓ |
| DEBORAH J. KAHN, JOAN C. MITRIUS, AND DAVID C. U'PRICHARD. α_2 -Adrenergic Receptors in Neuroblastoma × Glioma Hybrid Cells: Characterization with Agonist and Antagonist Radioligands and Relationship to Adenylate Cyclase | 17 |
| DAVID B. BYLUND, J. RICARDO MARTINEZ, AND DAN L. PIERCE. Regulation of Autonomic Receptors in Rat Submandibular Gland | 27 |
| JOEL S. KARLINER, HARVEY J. MOTULSKY, AND PAUL A. INSEL. Apparent "Down-Regulation" of Human Platelet α_2 -Adrenergic Receptors Is Due to Retained Agonist .. | 36 ✓ |
| MARK W. HAMBLIN AND IAN CREESE. Phenoxybenzamine Treatment Differentiates Dopaminergic ^3H -Ligand Binding Sites in Bovine Caudate Membranes | 44 |
| MARK W. HAMBLIN AND IAN CREESE. Heat Treatment Mimics Guanosine 5'-Triphosphate Effects on Dopaminergic ^3H -Ligand Binding to Bovine Caudate Membranes | 52 |
| TED H. CHIU, DAVID M. DRYDEN, AND HOWARD C. ROSENBERG. Kinetics of [^3H]Flunitrazepam Binding to Membrane-Bound Benzodiazepine Receptors | 57 |
| SERGE CHAMPION AND JEAN MAUCHAMP. Muscarinic Cholinergic Receptors on Cultured Thyroid Cells. I. Biological Effect of Carbachol and Characterization of the Receptors | 66 |
| SERGE CHAMPION AND JEAN MAUCHAMP. Muscarinic Cholinergic Receptors on Cultured Thyroid Cells. II. Carbachol-Induced Desensitization | 73 |
| CHRISTIAN GESPACH AND JEAN-PIERRE ABITA. Human Polymorphonuclear Neutrophils: Pharmacological Characterization of Histamine Receptors Mediating the Elevation of Cyclic AMP | 78 ✓ |
| MARY SELLINGER-BARNETTE AND BENJAMIN WEISS. Interaction of β -Endorphin and Other Opioid Peptides with Calmodulin | 86 |
| C. BRIAND, M. SARRAZIN, V. PEYROT, R. GILLI, M. BORDEAUX, AND J. C. SARI. Study of the Interaction between Human Serum Albumin and Some Cephalosporins | 92 |
| VIVIANE MAES, YVES ENGELBORGHES, JOHAN HOEBEKE, YVAN MARAS, AND ANTOINE VERCROYSE. Fluorimetric Analysis of the Binding of Warfarin to Human Serum Albumin: Equilibrium and Kinetic Study | 100 |
| PER M. UELAND, JARLE AARBAKKE, AND ATLE BESSESEN. Characterization of S-Adenosylhomocysteine Binding to Isolated Rat Hepatocytes and Purified Rat Liver Plasma Membranes: Effect of Analogues of S-Adenosylhomocysteine | 108 |
| D. R. HAUBRICH AND A. B. PFLUEGER. The Autoreceptor Control of Dopamine Synthesis: An <i>in Vitro</i> and <i>in Vivo</i> Comparison of Dopamine Agonists | 114 |
| TERRY N. SPEARMAN AND FRED R. BUTCHER. Rat Parotid Gland Protein Kinase Activation: Relationship to Enzyme Secretion | 121 |
| TSUTOMU UCHIDA, HIDEKI ITO, BRUCE J. BAUM, GEORGE S. ROTH, CHARLES R. FILBURN, AND BERTRAM SACKTOR. α_1 -Adrenergic Stimulation of Phosphatidylinositol-Phosphatidic Acid Turnover in Rat Parotid Cells | 128 ✓ |

(continued)

MOLECULAR PHARMACOLOGY (ISSN 0026-895x) is published bi-monthly by The American Society for Pharmacology and Experimental Therapeutics, 9650 Rockville Pike, Bethesda, MD. 20814. 1982: Volumes 21-22. Price per volume: USA individual rate \$65.00; all other countries, surface mail \$75.00; air mail \$85.00-\$110.00 depending on location. USA institutional rate \$130.00; all other countries, surface mail \$140.00; air mail \$150.00-\$175.00 depending on location. All subscription orders should be addressed to Molecular Pharmacology, ASPET, 9650 Rockville Pike, Bethesda, MD. 20814. Send notice of address changes at least 6-8 weeks in advance.

Second Class Postage paid at Bethesda, MD. and at additional mailing offices. POSTMASTER send address changes (Form 3579) to 9650 Rockville Pike, Bethesda, MD. 20814.

Copyright © 1982 by The American Society for Pharmacology and Experimental Therapeutics.

CONTENTS (cont'd)

| | |
|---|-----|
| KANDIAH SIVARAJAH, JEROME M. LASKER, THOMAS E. ELING, AND MOHAMED B. ABU-DONIA. Metabolism of <i>N</i> -Alkyl Compounds during the Biosynthesis of Prostaglandins: <i>N</i> -Dealkylation during Prostaglandin Biosynthesis | 133 |
| RONALD M. BURCH AND PERRY V. HALUSHKA. Inhibition of Prostaglandin Synthesis Antagonizes the Colchicine-Induced Reduction of Vasopressin-Stimulated Water Flow in the Toad Urinary Bladder | 142 |
| DANIEL W. ROSENBERG, GEORGE S. DRUMMOND, AND ATTALLAH KAPPAS. The Influence of Organometals on Heme Metabolism: <i>In Vivo</i> and <i>in Vitro</i> Studies with Organotins. | 150 |
| PATRICK E. HANNA, R. BRUCE BANKS, AND VIRGINIA CREEDON MARHEVKA. Suicide Inactivation of Hamster Hepatic Arylhydroxamic Acid <i>N,O</i> -Acytransferase: A Selective Probe of <i>N</i> -Acetyltransferase Multiplicity | 159 |
| JAMES HALPERT. Further Studies of the Suicide Inactivation of Purified Rat Liver Cytochrome P-450 by Chloramphenicol | 166 |
| DOUGLAS S. COVEY AND WILLIAM F. HOOD. Aromatase Enzyme Catalysis Is Involved in the Potent Inhibition of Estrogen Biosynthesis Caused by 4-Acetoxy- and 4-Hydroxy-4-androstene-3,17-dione | 173 |
| RONALD T. BORCHARDT, DONALD KUONEN, JOAN A. HUBER, AND ALLAN MOORMAN. Inhibition of Calf Thymus and Rat Hypothalamic Synaptosomal Protein Carboxymethyltransferase by Analogues of <i>S</i> -Adenosylhomocysteine | 181 |
| A. J. HOPFINGER AND R. POTENZONE, JR. Ames Test and Antitumor Activity of 1-(<i>X</i> -Phenyl)-3,3-dialkyltriazenes: Quantitative Structure-Activity Studies Based upon Molecular Shape Analysis | 187 |
| VIRGIL H. DUVERNAV, DAVID EUBANKS, RICHARD PERALES, ARCHIE W. PRESTAYKO, AND STANLEY T. CROOKE. The Antitumor Effects of Anthracyclines. II. The Stereospecificity of the Carbomethoxy Group at Position 10 of the Class II Anthracycline Molecule..... | 196 |
| L. W. TAYLOR, P. SLOWIACZEK, P. R. FRANCIS, AND M. H. N. TATTERSALL. Biochemical and Cell Cycle Perturbations in Methotrexate-Treated Cells | 204 |
| HOLLY A. INGRAHAM, BEN Y. TSENG, AND MEHRAN GOULIAN. Nucleotide Levels and Incorporation of 5-Fluorouracil and Uracil into DNA of Cells Treated with 5-Fluorodeoxyuridine..... | 211 |
| E. DE CLERCQ, J. BALZARINI, J. DESCAMPS, G.-F. HUANG, P. F. TORRENCE, D. E. BERGSTROM, A. S. JONES, P. SERAFINOWSKI, G. VERHELST, AND R. T. WALKER. Antiviral, Antimetabolic, and Cytotoxic Activities of 5-Substituted 2'-Deoxycytidines | 217 |
| CHI-MING LIANG, ROSS C. DONEHOWER, AND BRUCE A. CHABNER. Biochemical Interactions between <i>N</i> -(Phosphonacetyl)- <i>L</i> -Aspartate and 5-Fluorouracil | 224 |
| BARBARA A. DOMIN, YUNG-CHI CHENG, AND MARIE T. HAKALA. Properties of Dihydrofolate Reductase from a Methotrexate-Resistant Subline of Human KB Cells and Comparison with Enzyme from KB Parent Cells and Mouse S180 AT/3000 Cells | 231 |
| DAVID R. BICKERS, TAPU DUTTA-CHOUDHURY, AND HASAN MUKHTAR. Epidermis: A Site of Drug Metabolism in Neonatal Skin. Studies on Cytochrome P-450 Content and Mixed-Function Oxidase and Epoxide Hydrolase Activity | 239 |
| SANG S. PARK, SUN-JU CHA, HARUKO MILLER, ANDERS V. PERSSON, MINOR J. COON, AND HARRY V. GELBOIN. Monoclonal Antibodies to Rabbit Liver Cytochrome P-450 _{LM2} and Cytochrome P-450 _{LM4} | 248 |

Copyright © 1982 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-1982 articles are the same as those shown for current articles.