

CONTENTS

ACCELERATED COMMUNICATIONS

W. YOUNG, J. CHEN, F. JUNG, AND P. GARDNER. Dihydropyridine Bay K 8644 Activates T lymphocyte Calcium-Permeable Channels	239
DANIEL M. TAL AND STEVEN J. D. KARLISH. Do Canrenone and 6,7-Dihydroxylated Derivatives Compete with Oubain at the Same Site on Na,K-ATPase?	245
DOUGLAS W. BONHAUS AND JAMES O. MCNAMARA. N-Methyl-D-aspartate Receptor Regulation of Uncompetitive Antagonist Binding in Rat Brain Membranes: Kinetic Analysis	250
JOSEF GUT, DANIEL W. GOLDMAN, AND JAMES R. TRUDELL. Conversion of 5-Hydroperoxyeicosatetraenoic Acid into Leukotriene B ₄ by Rat Hepatocytes: A Novel Cellular Source for Leukotriene B ₄	256
S.-L. WANG, G. W. LUCIER, R. B. EVERSON, G. I. SUNAHARA, AND K. T. SHIV-ERICK. Smoking-Related Alterations in Epidermal Growth Factor and Insulin Receptors in Human Placenta	265

ARTICLES

LUCYNA ANTKIEWICZ-MICHALUK, ALESSANDRO GUIDOTTI, AND KARL E. KRUEGER. Molecular Characterization and Mitochondrial Density of a Recognition Site for Peripheral-Type Benzodiazepine Ligands	272
JOEL MOSS, BETTY E. HOM, ERIK L. HEWLETT, SU-CHEN TSAI, RONALD ADAMIK, JANE L. HALPERN, S. RUSS PRICE, AND VINCENT C. MANGANIELLO. Mechanism of Enhanced Sensitivity to Bradykinin in Pertussis Toxin-Treated Fibroblasts: Toxin Increases Bradykinin-Stimulated Prostaglandin Formation	279
H. J. KRAUSE AND R. L. JULIANO. Interaction of Liposome-Incorporated Amphotericin B with Kidney Epithelial Cell Cultures	286
TODD A. VERDOORN AND RAYMOND DINGLEDINE. Excitatory Amino Acid Receptors Expressed in <i>Xenopus</i> Oocytes: Agonist Pharmacology	298
JANET A. CLARK, RICHARD HOUGHTEN, AND GAVRIL W. PASTERNAK. Opiate Binding in Calf Thalamic Membranes: A Selective μ_1 Binding Assay	308
SULEIMAN W. BAHOUTH AND CRAIG C. MALBON. Subclassification of β -Adrenergic Receptors of Rat Fat Cells: A Re-evaluation	318
GARY R. LUTHIN, JULIA HARKNESS, ROMAN P. ARTYMSHYN, AND BARRY B. WOLFE. Antibodies to a Synthetic Peptide Can Be Used to Distinguish between Muscarinic Acetylcholine Receptor Binding Sites in Brain and Heart	327
MARK LEID, MICHAEL I. SCHIMERLIK, AND THOMAS F. MURRAY. Characterization of Agonist Radioligand Interactions with Porcine Atrial A ₁ Adenosine Receptors	334
MATTHEW S. COWLEN AND MYRON L. TOEWS. Evidence for α_1 -Adrenergic Receptor Internalization in DDT ₁ MF-2 Cells Following Exposure to Agonists plus Protein Kinase C Activators	340
HEINZ MUELLER, HARVEY J. MOTULSKY, AND LARRY A. SKLAR. The Potency and Kinetics of the β -Adrenergic Receptors on Human Neutrophils	347
LAURENCE A. BORDEN AND DAVID H. FARB. Mechanism of γ -Aminobutyric Acid/Benzodiazepine Receptor Turnover in Neuronal Cells: Evidence for Nonlysosomal Degradation	354
GILDA H. LOEW, JOHN A. LAWSON, EDWARD T. UYENO, LAWRENCE TOLL, GERNOT FRENKING, WILLMA POLGAR, L. Y. Y. MA, NORMAN CAMERMAN, AND ARTHUR CAMERMAN. Structure-Activity Studies of Morphine Fragments. I. 4-Alkyl-4-(<i>m</i> -Hydroxy-phenyl)-piperidines	363

MOLECULAR PHARMACOLOGY (ISSN 0026-895x) is published monthly by The American Society for Pharmacology and Experimental Therapeutics, 428 East Preston Street, Baltimore, MD 21202. Price per year: USA individual rate \$75.00; Japan \$123.00 (includes air freight); all other countries, surface mail \$90.00. USA institutional rate \$165.00; Japan \$213.00 (includes air freight); all other countries, surface mail \$180.00. (Prices subject to change.) All subscription orders should be addressed to Molecular Pharmacology, 428 East Preston Street, Baltimore, MD 21202.

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.

Copyright © 1988 by The American Society for Pharmacology and Experimental Therapeutics.

CONTENTS (cont'd)

TOSHIMASA ISHIDA, YASUKO IN, HIROFUMI OHISHI, DAISUKE YAMAMOTO, MASATOSHI INOUE, CHIAKI TANAKA, YOKO UENO, YOSHIROU OHMOMO, NANA KANDA, AKIRA TANAKA, AND TSUYOSHI TANIMOTO. Structure-Activity Relationship of Aldose Reductase Inhibitors Based on X-Ray Crystal Structures of Oxazolecaramate Derivatives	377
EIICHIRO OKABE, CHISATO ODAJIMA, RYUSEI TAGA, RAKESH C. KUKREJA, MICHAEL L. HESS, AND HARUO ITO. The Effect of Oxygen Free Radicals on Calcium Permeability and Calcium Loading at Steady State in Cardiac Sarcoplasmic Reticulum	388
SIGURD LENZEN, SVENJA FREYTAG, AND UWE FANTEN. Inhibition of Glucokinase by Alloxan through Interaction with SH Groups in the Sugar-Binding Site of the Enzyme	395
M. RABINOWITZ AND J. M. FISHER. Evidence for a Copper:S-(Methylthio)-L-homocysteine Complex as a Glutamine Antagonist of Cytidine Triphosphate Synthesis in L1210 Murine Leukemia Cells	401
DIETER SCHRENK, WOLFGANG DEKANT, AND DIETRICH HENSCHLER. Metabolism and Excretion of S-conjugates Derived from Hexachlorodibutadiene in the Isolated Perfused Rat Kidney	407
DIANE L. TRIBBLE, DEAN P. JONES, AND DALE E. EDMONDSON. Effect of Hypoxia on <i>tert</i> -Butylhydroperoxide-Induced Oxidative Injury in Hepatocytes	413

Copyright © 1988 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.