CONTENTS

ACCELERATED COMMUNICATIONS

IAN J. REYNOLDS. 1,5-(Diethylamino)piperidine, a Novel Spermidine Analogue that More Specifically Activates the N-Methyl-D-aspartate Receptor-Associated Polyamine Site 989

NICHOLAS R. BACHUR, FANG YU, ROBIN JOHNSON, ROBERT HICKEY, YAN WU, AND LINDA MALKAS. Helicase Inhibition by Anthracycline Anticancer Agents 993

ARTICLES

ANNIE VARRAULT, LAURENT JOURNOT, YVES AUDIGIER, AND JOEL BOCKAERT. Transfection of Human 5-Hydroxytryptamine1A Receptors in NIH-3T3 Fibroblasts: Effects of Increasing Receptor Density on the Coupling of 5-Hydroxytryptamine1A Receptors to Adenylyl Cyclase 999

TIMOTHY C. CHAMBERS, BIN ZHENG, AND J. F. KUO. Regulation by Phorbol Ester and Protein Kinase C Inhibitors, and by a Protein Phosphatase Inhibitor (Okadaic Acid), of F-Glycoprotein Phosphorylation and Relationship to Drug Accumulation in Multidrug-Resistant Human KB Cells 1008

MARIE-CLAUDE PEPIN, MANJAPRA V. GOVINDAN, AND NICHOLAS BARDEN. Increased Glucocorticoid Receptor Gene Promoter Activity after Antidepressant Treatment 1016

C. FRANK BENNETT, MING-YI CHIANG, HEDY CHAN, JO ELLEN E. SHOEMAKER, AND CHRISTOPHER K. MIRABELLI. Cationic Lipids Enhance Cellular Uptake and Activity of Phosphorothioate Antisense Oligonucleotides 1023

SHINYA WAKUSAWA, SHIGEO NAKAMURA, KAZUO TAJIMA, KEN-ICHI MIYAMOTO, MASATOSHI HAGIWARA, AND HIROYOSHI HIDAKA. Overcoming of Vinblastine Resistance by Isoquinolinesulfonamide Compounds in Adriamycin-Resistant Leukemia Cells 1034

LILA H. OVERBY, SUSAN NISHIO, ALISON WEIR, GERALDINE T. CARVER, CHARLES G. FLOPPER, AND RICHARD M. PHILPOT. Distribution of Cytochrome P450 1A1 and NADPH-Cytochrome P450 Reductase in Lungs of Rabbits Treated with 2,3,7,8-Tetrachlorodibenzo-p-dioxin: Ultrastructural Immunolocalization and In Situ Hybridization 1039

LYDIANE PICHARD, ISABELLE FABRE, MARTINE DAJJAT, JACQUES DOMERGUE, HENRI JOYEUX, AND PATRICK MAUREL. Effect of Corticosteroids on the Expression of Cytochromes P450 and on Cyclosporin A Oxidase Activity in Primary Cultures of Human Hepatocytes 1047

Diane L. Barber, Michael B. Ganz, Peter B. Bongiorno, and Catherine D. Strader. Mutant Constructs of the β-Adrenergic Receptor that Are Uncoupled from Adenylyl Cyclase Retain Functional Activation of Na-H Exchange 1056

Continued
CONTENTS (cont’d)

ANNE H. CHEUNG, RUEY-RUEY C. HUANG, AND CATHERINE D. STRADER. Involvement of Specific Hydrophobic, but not Hydrophilic, Amino Acids in the Third Intracellular Loop of the β-Adrenergic Receptor in the Activation of \( G_{\alpha} \) .................................................. 1061

FRANK D. YOCCA, LAWRENCE IBEN, AND EMANUEL MELLER. Lack of Apparent Receptor Reserve at Postsynaptic 5-Hydroxytryptamine\(_{1A}\) Receptors Negatively Coupled to Adenylyl Cyclase Activity in Rat Hippocampal Membranes ............................................. 1066


WOLFGANG WIENEN, ANNEROSE B. M. MAUZ, JACQUES C. A. VAN MEEL, AND MICHAEL ENTZEROTH. Different Types of Receptor Interaction of Peptide and Nonpeptide Angiotensin II Antagonists Revealed by Receptor Binding and Functional Studies ........................................ 1081

CHRISTIANE DURIEUX, MARIANO RUIZ-GAYO, PIERRE-JEAN CORRINGER, FLORENCE BERGERON, BERTRAND DUCOS, AND BERNARD P. ROQUES. \([^{3}H]\)pBC 264, a Suitable Probe for Studying Cholecystokinin-B Receptors: Binding Characteristics in Rodent Brains and Comparison with \([^{3}H]SNF 8702\). .................................................. 1089

MARGARET A. CASCIERI, RUEY-RUEY C. HUANG, TUNG MING FONG, ANNE H. CHEUNG, SHARON SADOWSKI, ELZBIETA BER, AND CATHERINE D. STRADER. Determination of the Amino Acid Residues in Substance P Confering Selectivity and Specificity for the Rat Neurokinin Receptors ........................................................................ 1096

B. CHATRENET, F. KOTZYBA-HIBERT, C. MULLE, J. P. CHANGEUX, M. P. GOELDNER, AND C. HIRTH. Photoactivatable Agonist of the Nicotinic Acetylcholine Receptor: Potential Probe to Characterize the Structural Transitions of the Acetylcholine Binding Site in Different States of the Receptor ........................................... 1100

R. M. WOODWARD, L. POLENZANI, AND R. MILEDI. Effects of Hexachlorocyclohexanes on γ-Aminobutyric Acid Receptors Expressed in Xenopus Oocytes by RNA from Mammalian Brain and Retina ......................................................... 1107

NANCY J. LEIDENHEIMER, SUSAN J. MCQUILKIN, LISA D. HAHNER, PAUL WHITING, AND R. ADRON HARRIS. Activation of Protein Kinase C Selectively Inhibits the γ-Aminobutyric Acid, Receptor: Role of Desensitization .................................................. 1116

PATRICIA P. EDGAR AND ROCHELLE D. SCHWARTZ. Functionally Relevant γ-Aminobutyric Acid, Receptors: Equivalence between Receptor Affinity \((K_d)\) and Potency \((EC_{50})\) .......................................... 1124

KENTON J. SWARTZ, WALTER J. KOROSHEZT, ALUN H. REES, AND JAMES E. HUETTNER. Competitive Antagonism of Glutamate Receptor Channels by Substituted Benzazepines in Cultured Cortical Neurons .............................................................................. 1130

KAREN R. IORIO, LESLIE REINLIB, BORIS TABAKOFF, AND PAULA L. HOFFMAN. Chronic Exposure of Cerebellar Granule Cells to Ethanol Results in Increased N-Methyl-D-aspartate Receptor Function ............................................ 1142

Continued
CONTENTS (cont'd)

WEI QU, ERIC SAVIER, AND RONALD G. THURMAN. Stimulation of Monooxygenation and Conjugation after Liver Transplantation in the Rat: Involvement of Kupffer Cells 1149

PETER A. GLASCOTT, JR., ELLEN GILFOR, AND JOHN L. FARBER. Effects of Vitamin E on the Killing of Cultured Hepatocytes by tert-Butyl Hydroperoxide 1155

JANE A. MITCHELL, KATHY L. KOHLHAAS, TAKAHIRO MATSUMOTO, JENNIFER S. POLLOCK, ULRICH FORSTERMANN, TIMOTHY D. WARNER, HAROLD H. H. W. SCHMIDT, AND FERID MURAD. Induction of NADPH-Dependent Diaphorase and Nitric Oxide Synthase Activity in Aortic Smooth Muscle and Cultured Macrophages 1163

AUTHOR INDEX 1169

SUBJECT INDEX 1178

DEDICATION

Dr. Michael J. Peach, who was a member of the Editorial Advisory Board of Molecular Pharmacology, died on March 15, 1992. Volume 41 of Molecular Pharmacology is dedicated to his memory.