## CONTENTS

**MUSCARINIC STIMULATION OF PHOSPHATIDYLINOSITOL METABOLISM IN ATRIA**
Susan L. Brown and Joan Heller Brown

**MUSCARINIC ANTAGONISTS INDUCE DIFFERENT RECEPTOR CONFORMATIONS IN RAT ADENOHYPOTHYSIS**
Yoav I. Henis and Mordechai Sokolovsky

**MUSCARINIC RECEPTORS IN PORCINE CAUDATE NUCLEUS. I. ENHANCEMENT BY NICKEL AND OTHER CATIONS OF [3H]CIS-METHYLDIOXOLANE BINDING TO GUANYL NUCLEOTIDE-SENSITIVE SITES**
Toshihide Nukada, Tatsuya Haga, and Arata Ichiyama

**MUSCARINIC RECEPTORS IN PORCINE CAUDATE NUCLEUS. II. DIFFERENT EFFECTS OF N-ETHYLMALEIMIDE ON [3H]CIS-METHYLDIOXOLANE BINDING TO HEAT-LABILE (GUANYL NUCLEOTIDE-SENSITIVE) SITES AND HEAT-STABLE (GUANYL NUCLEOTIDE-INSENSITIVE) SITES**
Toshihide Nukada, Tatsuya Haga, and Arata Ichiyama

**INVOLVEMENT OF A HIGH-AFFINITY GTPASE IN THE INHIBITORY COUPLING OF STRIATAL MUSCARINIC RECEPTORS TO ADENYLYL CYCLASE**
Pierluigi Onali, Maria C. Olianas, Joan P. Schwartz, and Ermilio Costa

**[3H]ACETYLCHOLINE BINDING SITES IN BRAIN: EFFECT OF DISULFIDE BOND MODIFICATION**
Rochelle D. Schwartz and Kenneth J. Kellar

**DIFFERENCES BETWEEN AGONIST AND ANTAGONIST BINDING TO ALPHA1-ADRENERGIC RECEPTORS OF INTACT AND BROKEN-CELL PREPARATIONS**
Randall N. Fittman and Perry B. Molinoff

**INITIAL DETECTION OF [3H]PRAZOSIN-Labeled ALPHA1-RECEPTORS IN THE PORCINE PITUITARY NEUROINTERMEDIATE LOBE**
George Battaglia, Michael Shannon, and Milt Titelel

**OPIATE RECEPTOR DOWN-REGULATION AND DENSITIZATION IN NEUROBLASTOMA X GLIOMA NG108-15 HYBRID CELLS ARE TWO SEPARATE CELLULAR ADAPTATION PROCESSES**
P. Y. Law, D. S. Hom, and H. H. Loi

**QUINAZOLINES AND 1,4-BENZODIAZEPINES. 92. CONFORMATIONAL RECOGNITION OF THE RECEPTOR BY 1,4-BENZODIAZEPINES**
John F. Blount, R. Ian Fryer, Norman W. Gilman, and Louis J. Todaro

**CONJUGATES OF CATECHOLAMINES. II. IN VITRO AND IN VIVO PHARMACOLOGICAL ACTIVITY OF N-ALKYL-FUNCTIONALIZED CARBOXYLIC ACID CONGENERS AND AMIDES RELATED TO ISOPTERENOL**

**STRUCTURE-ACTIVITY RELATIONSHIPS OF CHOLINESTERASE INHIBITORS. I. QUANTUM MECHANICAL STUDY OF AFFINITIES OF PHENYL N-METHYL CARBAmates**
Amiram Goldblum

**AB INITIO MOLECULAR ORBITAL CALCULATIONS OF ELECTRON DISTRIBUTION IN TETRAMETHYLMAMMONIUM ION**

**BARBITURATE EFFECTS ON ACETYLCHOLINE-ACTIVATED CHANNELS IN APHYSIA NEURONS**
Ruth E. Wachtel and Wilkie A. Wilson, Jr.

**STRUCTURAL REQUIREMENTS FOR DRUG BINDING TO SITE II ON HUMAN SERUM ALBUMIN**
Sompon Wanwimolrux, Donald J. Birckett, and Peter M. Brooks

**ADIPOSE TISSUE CONTENT AS A MODIFIER OF THE TISSUE DISTRIBUTION, BIOLOGICAL EFFECTS, AND EXCRETION OF A HEXACHLOROBIPHENYL IN C57BL/6J AND DBA/JBOMf MICE**
Markku Ahopruu and Eero Mantyla

(continued)
CONTENTS (cont'd)

LEE C. WOODSON, MATTHEW M. AMES, CYNTHIA DIAS SELASSIE, CORWIN HANSC, AND RICHARD M. WEINSHILBOUM. Thiopurine Methyltransferase: Aromatic Thiol Substrates and Inhibition by Benzoic Acid Derivatives 471

JUDITH A. BELT. Heterogeneity of Nucleoside Transport in Mammalian Cells: Two Types of Transport Activity in L1210 and Other Cultured Neoplastic Cells 479

WILLIAM T. BECK, MARGARET C. CIRTAIN, AND JANET LEFKO. Energy-Dependent Reduced Drug Binding as a Mechanism of Vinca Alkaloid Resistance in Human Leukemic Lymphoblasts 485

E. TIMOTHY O'BRIEN, ROBERT S. JACOBS, AND LESLIE WILSON. Inhibition of Bovine Brain Microtubule Assembly in Vitro by Styphol dine 493

STEVEN J. WHITE AND ROBERT S. JACOBS. Effect of Stypoldione on Cell Cycle Progression, DNA and Protein Synthesis, and Cell Division in Cultured Sea Urchin Embryos 499

ROBERT I. GLAZER AND KATHLEEN D. HARTMAN. In Vitro Translational Activity of Messenger RNA following Treatment of Human Colon Carcinoma Cells with Sangivamycin 509

STEPHEN BRIMJOIN, KEITH P. MINTZ, AND MICHAEL C. ALLEY. Production and Characterization of Separate Monoclonal Antibodies to Human Acetylcholinesterase and Butyrylcholinesterase 513

PETER F. KADOR AND NORMAN E. SHARPLESS. Pharmacophor Requirements of the Aldose Reductase Inhibitor Site 521

AUTHOR INDEX FOR VOLUME 24 533

CUMULATIVE SUBJECT INDEX FOR VOLUMES 23 AND 24 537