

CONTENTS

Chronic Effects of Paraoxon on Transmitter Release and the Synaptic Contribution to Tolerance. Robert H. Thomsen and David F. Wilson	689
β-Endorphin-Induced Stimulation of Central Sympathetic Outflow: Inhibitory Modulation by Central Noradrenergic Neurons. Nathan M. Appel and Glen R. Van Loon	695
Effect of Repeated Restraint Stress, Desmethylinipramine or Adrenocorticotropin on the α and β Adrenergic Components of the cyclic AMP Response to Norepinephrine in Rat Brain Slices. Eric A. Stone, Jane E. Platt, Ariel S. Herrera and Kenneth L. Kirk	702
Myocardial Uptake Kinetics and Pharmacodynamics of Propafenone in the Isolated Perfused Rabbit Heart. Anne M. Gillis and Robert E. Kates	708
Relationship between Receptors Mediating Serotonin (5-HT) Contractions in the Canine Basilar Artery to 5-HT₁, 5-HT₂ and Rat Stomach Fundus 5-HT Receptors. Marlene L. Cohen and Walter E. Colbert	713
Effect of PGD₂ on Cardiac Contractility: A Negative Inotropism Secondary to Coronary Vasoconstriction Conceals a Primary Positive Inotropic Action. Yuichi Hattori and Roberto Levi	719
Activation of α-2 Adrenergic Receptors Augments Neurotransmitter-Stimulated cyclic AMP Accumulation in Rat Brain Cerebral Cortical Slices. Andrzej Pilc and S. J. Enna	725
(-)-[³H]Desmethoxyverapamil Labels Multiple Calcium Channel Modulator Receptors in Brain and Skeletal Muscle Membranes: Differentiation by Temperature and Dihydropyridines. Ian J. Reynolds, Adele M. Snowman and Solomon H. Snyder	731
Effects of Propranolol on Catecholamine Synthesis and Uptake in the Central Nervous System of the Rat. Noreen Tuross and Robert L. Patrick	739
Relative Presynaptic and Postsynaptic Effects of Urapidil on Adrenoceptors in the Rabbit Pulmonary Artery. Robert Zelis	746
Hepatic UDP-Glucuronic Acid Regulation during Acetaminophen Biotransformation in Rats. Jerry J. Hjelle	750
Effects of Prolonged Isoproterenol Infusion on Cardiac and Vascular Responses to Adrenoceptor Agonists. J. Scott Hayes, Virginia L. Wyss, Kathryn S. Schenck and Marlene L. Cohen	757
Regulation of Rat Heart Membrane Adenylate Cyclase by Magnesium and Manganese. Susan F. Steinberg, Yung K. Chow and John P. Bilezikian	764
Structure-Activity Relationship of Lidocaine Homologs Producing Tonic and Frequency-Dependent Impulse Blockade in Nerve. Paula M. Bokesch, Claes Post and Gary Strichartz	773
Characterization of Substance P-Induced Contractions of Guinea-Pig Trachea. Peter E. Malo, Martin A. Wasserman, Theodore J. Torphy, Deborah J. Parris and David F. Pfeiffer	782
Acute, Stress-Induced Changes in the Benzodiazepine/γ-Aminobutyric Acid Receptor Complex Are Confined to the Chloride Ionophore. H. Havoundjian, S. M. Paul and P. Skolnick	787
Malotilate (Diisopropyl 1,3-Dithiol-2-Ylidenemalonate) Increases Liver <i>De Novo</i> Purine Synthesis and Amidophosphoribosyltransferase Activity. Mitsuo Itakura, Masami Tsuchiya, Kamejiro Yamashita and Toshitsugu Oda	794
Effect of Renal Denervation on the Antinatriuretic Response to Morphine Administration in Conscious Rats. L. A. Walker and J. C. Murphy	799
Inhibitory Effects of a Synthetic Atrial Peptide on Contractions and ⁴⁵Ca Fluxes in Vascular Smooth Muscle. Cathy J. Taylor and Kaushik D. Meisheri	803
Nicotine-Induced Tolerance and Receptor Changes in Four Mouse Strains. Michael J. Marks, Elena Romm, David K. Gaffney and Allan C. Collins	809
Desensitization of Rat Striatal Dopamine-Stimulated Adenylate Cyclase after Acute Amphetamine Administration. Joey V. Barnett and Ronald Kuczenski	820
Influence of Mebendazole on Insulin Secretion from Isolated Rat Islets. Walter S. Zawalich, Victoria Diaz and Susan Cote	826
Differential Recovery of β Adrenoreceptor Antagonist and Agonist High Affinity Binding Sites in the Guinea-Pig Lung after Irreversible Blockade. Carol A. Nelson, Thomas F. Muther, Josef Pitha and Stephen P. Baker	830

Contents Continued on iv

This One



OFCJ-RDX-DDC6

Biological Activity of the C-1, C-3, C-25, β-D-Glucopyranosides of 1,25-Dihydroxyvitamin D₃. James M. Londowski, Susan Bollman Kost, Werner Meier, Ludvik Labler and Rajiv Kumar	837
Morphine Dependence and Diabetes. I. The Development of Morphine Dependence in Streptozotocin-Diabetic Rats and Spontaneously Diabetic C57BL/KsJ Mice. Jennifer E. Shook and William L. Dewey	841
Morphine Dependence and Diabetes. II. Alterations of Normorphine Potency in the Guinea-Pig Ileum and Mouse Vas Deferens and of Ileal Morphine Dependence by Changes in Glucose Concentration. Jennifer E. Shook, James F. Kachur, David A. Brase and William L. Dewey	848
Inhibition of Na⁺ Flux in Chinese Hamster Ovary Cells and Swiss 3T3 Cells by a Potent New Derivative of Amiloride, Methylisopropyl-Amiloride. Martha E. O'Donnell, Edward J. Cragoe, Jr. and John H. Becker	853
Marihuana Smoking Suppresses Luteinizing Hormone in Women. Jack H. Mendelson, Nancy K. Mello, James Ellingboe, Alice S. T. Skupny, Barbara W. Lex and Margaret Griffin	862
Pulmonary Sequestration of Amiodarone and Desethylamiodarone. Philippe Camus and Harihara M. Mehendale	867
Thyroid Status during Postnatal Maturation of the Brain in Mice Genetically Bred for Differences in Ethanol Sensitivity. Jeffrey K. Disbrow, Joseph M. Masserano and Norman Weiner	874
Baclofen Suppresses Hippocampal Epileptiform Activity at Low Concentrations Without Suppressing Synaptic Transmission. H. Scott Swartzwelder, Andrew C. Bragdon, Christopher P. Sutch, Brian Ault and Wilkie A. Wilson	881
Leukotriene B₄ and 20-Hydroxyleukotriene B₄ Contract Guinea-Pig Trachea Strips <i>in Vitro</i>. Charles Lawson, Stuart Bunting, Henry Holzgrefe and Frank Fitzpatrick	888
Activation of Purified Soluble Guanylate Cyclase by Endothelium-Derived Relaxing Factor from Intrapulmonary Artery and Vein: Stimulation by Acetylcholine, Bradykinin and Arachidonic Acid. Louis J. Ignarro, Richard G. Harbison, Keith S. Wood and Philip J. Kadowitz	893
Canine Basilar Artery Contractions Mediated by 5-Hydroxytryptamine_{1A} Receptors. Stephen J. Peroutka, Shan Huang and George S. Allen	901
Qualitative and Quantitative Comparison of the Cardiac Effects of Encainide and Its Three Major Metabolites in the Dog. Jean-Marc Davy, Paul Dorian, Jean-Pierre Kantelip, Donald C. Harrison and Robert E. Kates	907
Pharmacodynamics and Onset of Action of Esmolol in Anesthetized Dogs. Check Y. Quon and Richard J. Gorczynski ..	912
Inhibition of Renal Membrane Binding and Nephrotoxicity of Aminoglycosides. P. D. Williams, G. H. Hottendorf and D. B. Bennett	919
Behavioral and Neurochemical Evaluation of Phenylpropanolamine. William L. Woolverton, Chris E. Johanson, Rene de la Garza, Susan Ellis, Lewis S. Seiden and Charles R. Schuster	926
Comparison of Amphetamine Metabolism Using Isolated Hepatocytes from Five Species Including Human. Carol E. Green, Susanna E. LeValley and Charles A. Tyson	931
Pharmacological Properties of Acetorphan, a Parenterally Active "Enkephalinase" Inhibitor. Jeanne-Marie Lecomte, Jean Costentin, Adina Vlaiculescu, Pierre Chaillet, Hélène Marçais-Collado, Catherine Llorens-Cortes, Marion Leboyer and Jean-Charles Schwartz	937
Inhibition of Gastrointestinal Transit by Morphine in Rats Results Primarily from Direct Drug Action on Gut Opioid Sites. Luciano Manara, Giancarlo Bianchi, Patrizia Ferretti and Alessandra Tavani	945
Responses Mediated <i>Via</i> Beta-1 Adrenoceptors but not Beta-2 Adrenoceptors Exhibit Supersensitivity after Chronic Reserpine Pretreatment. Paul F. Grassby and Kenneth J. Broadley	950
Distribution and Metabolism of Nitroglycerin and Its Metabolites in Vascular Beds of Sheep. P. A. Cossum, M. S. Roberts, A. C. Yong and D. Kilpatrick	959
Uptake of Lipophilic Model Compounds into the Isolated Perfused Rat Epididymal Adipose Tissue. Roger Gubser, Cristina Di Francesco and Marcel H. Bickel	967
Ontogeny of Renal Alpha-1 and Alpha-2 Adrenoceptors in the Spontaneously Hypertensive Rat. Adela Sánchez, María José Vidal, Rafael Martínez-Sierra and Jesús Sáiz	972
Species Difference in the Muscarinic Receptors of Thoracic Aorta. Kyozo Yamanaka, Shigeki Hashimoto and Ikunobu Muramatsu	980
Modification of Serotonergic and Noradrenergic Neurotransmissions by Repeated Administration of Monoamine Oxidase Inhibitors: Electrophysiological Studies in the Rat Central Nervous System. Pierre Blier, Claude de Montigny and Albert J. Azzaro	987
Effect of Cholera Toxin and Pertussis Toxin on Opioid Tolerance and Dependence in the Guinea-Pig Myenteric Plexus. Bettina Lux and Rüdiger Schulz	995
Sodium Valproate, But Not Ethosuximide, Produces Use- and Voltage-Dependent Limitation of High Frequency Repetitive Firing of Action Potentials of Mouse Central Neurons in Cell Culture. Michael J. McLean and Robert L. MacDonald	1001
Rat Liver Microsomal Induction of the Oxidation of Drugs and Alcohols, and Sodium Dodecyl Sulfate-Gel Profiles after <i>in Vivo</i> Treatment with Pyrazole or 4-Methylpyrazole. Graciela Krikun, Dennis E. Feerman and Arthur I. Cederbaum	1012