

CONTENTS

Identification and Characterization of Substance P Receptors on LRM55 Glial Cells. Mark H. Perrone, Rhonda D. Lepore and William Shain	389
Desensitization of Aortic Smooth Muscle Contraction in Rats Harboring Pheochromocytoma. Jan S. Rosenbaum, Paulene Zera, Victor A. Umans, Robert Ginsburg and Brian B. Hoffman	396
Mechanism of Action and Structural Requirements of Vasopressin Analog Inhibition of Transepithelial Water Flux in Toad Urinary Bladder. W. A. Mann, F. Stassen, W. Huffman and L. B. Kinter	401
Bumetanide Inhibition of [CO₂ + HCO₃]-Dependent and -Independent Equivalent Electrical Flux in Renal Cortical Thick Ascending Limbs. Peter A. Friedman	407
Effects of Detergents on Sodium Transport in Toad Urinary Bladder. J. H.-Y. Li, J. S. Zuzack and S. T. Kau	415
Beneficial Effects of Two Specific Bradycardic Agents AQ-A39 (Falipamil) and AQ-AH 208 on Reversible Myocardial Reperfusion Damage in Anesthetized Dogs. Garrett J. Gross and Juergen W. Daemmgen	422
Kappa Opiate Agonists Modulate the Hypothalamic-Pituitary-Adrenocortical Axis in the Rat. Smriti Iyengar, Helen S. Kim and Paul L. Wood	429
Interactions between Endogenous Dopamine and Dopamine Agonists at Release Modulatory Receptors: Multiple Effects of Neuronal Uptake Inhibitors on Transmitter Release. Irene S. Hoffmann, Reiza K. Talmaciu and Luigi X. Cubeddu	437
Presynaptic Regulation of Cardiac Sympathetic Function in Guinea Pigs. Phillip G. Schmid, Carol A. Whiteis, Robert P. Oda and Donald D. Lund	447
Protective Effects of Ibuprofen and Methylprednisolone on Chemotactic Factor-Induced Transcutaneous Hypoxia. Eufronio G. Maderazo, Steven P. Breaux and Charles L. Woronick	453
Metabolism and Excretion of Nitrofurthiazole Bladder Carcinogens. Leslie Spry, Vijaya M. Lakshmi, Terry Zenser and Bernard Davis	457
Effect of Reduced Hepatic Energy State on Acetaminophen Conjugation in Rats. Russell L. Dills and Curtis D. Klaassen	463
CI-926 (3-[4-[4-(3-Methylphenyl)-1-Piperazinyl]Butyl]-2,4-Imidazolinedione): Antihypertensive Profile and Pharmacology. M. J. Ryan, F. A. Bjork, D. M. Cohen, L. L. Coughenour, T. C. Major, N. P. Mathias, T. E. Mertz, B. J. Olszewski, R. M. Singer, D. B. Evans and H. R. Kaplan	473
5-Hydroxytryptamine₂ Receptors Coupled to Phospholipase C in Rat Aorta: Modulation of Phosphoinositide Turnover by Phorbol Ester. Bryan L. Roth, Toshio Nakaki, De-Maw Chuang and Erminio Costa	480
Rapid Desensitization of the Acute Stimulatory Effects of Nicotine on Rat Plasma Adrenocorticotropin and Prolactin. Burt M. Sharp and H. Stephen Beyer	486
Development of High Sodium Renal Hypertension during Chronic Blockade of the Vascular Effects of Vasopressin. Carmen Hinojosa and Joseph R. Haywood	492
Reduction in the Incidence of Thrombosis by the Thromboxane Synthetase Inhibitor CGS 13080 in a Canine Model of Coronary Artery Injury. Paul J. Simpson, Charles B. Smith, Jr., Guy Rosenthal and Benedict R. Lucchesi	497
Stimulation of Cardiac Myofilament Force, ATPase Activity and Troponin C Ca⁺⁺ Binding by Bepiridil. R. John Solaro, Pascal Bousquet and J. David Johnson	502
In Vivo Action of Enzyme-Activated Irreversible Inhibitors of Glutamic Acid Decarboxylase and γ-Aminobutyric Acid Transaminase in Retina vs. Brain. Joseph F. Cubells, John S. Blanchard, Diane M. Smith and Maynard H. Makman	508
Differential Inhibition of Alpha-1 vs. Alpha-2 Adrenoceptor-Mediated Responses in Canine Saphenous Vein by Nitroglycerin. Hanna Eskinder and Garrett J. Gross	515
Behavioral Effects of Zoplicone, CL 218,872 and Diazepam in Squirrel Monkeys: Antagonism by Ro 15-1788 and CGS 8216. Joseph G. Wettstein and Roger D. Speakman	522
Modulation of the Behavioral Effects of Anticonvulsant Drugs by an External Discriminative Stimulus in the Pigeon. Mitchell Picker, Lisa Leibold, Beth Endsley and Alan Poling	529
Comparative Effects of Ketanserin, Atropine and Methysergide on the Gastrointestinal Effects of Hyperserotonemia in the Awake Dog. B. M. Jaffe, A. Ferrara and D. J. Sherlock	536
Tolerance to Caffeine-Induced Stimulation of Locomotor Activity in Rats. Ira B. Finn and Stephen G. Holtzman	542
Activation of DA₁ Receptors by Dopamine or Fenoldopam Increases cyclic AMP Levels in the Renal Artery but Not in the Superior Cervical Ganglion of the Rat. Karim A. Alkadhhi, Majd H. Sabouni, Ahmed F. Ansari and Mustafa F. Lokhandwala	547

Contents Continued on iv

Multiple Binding Affinities of N-Methylscopolamine to Brain Muscarinic Acetylcholine Receptors: Differentiation from M₁ and M₂ Receptor Subtypes. Esam E. El-Fakahany, Vickram Ramkumar and Wi S. Lai	554
Facilitation of Recurrent Inhibition in Rat Hippocampus by Barbiturate and Related Non-barbiturate Depressant Drugs. Thomas V. Dunwiddie, Thomas S. Worth and Richard W. Olsen	564
Evidence for <i>Alpha</i> Adrenoceptor Modulation of the Nociceptive Jaw-Opening Reflex in Rats and Rabbits. A. L. Curtis and J. Marwah	576
Analysis of Cardiac Muscarinic Receptors Selectively Recognized by Non-quaternary but Not by Quaternary Ligands. Joan Heller Brown and David Goldstein	580
Pharmacological Comparison of ORF 17910, a Potent, Long-Acting Histamine H₂-Receptor Antagonist, to Cimetidine and Ranitidine. Laurence B. Katz, Cynthia K. Scott and David A. Shriver	587
Cholinergic Neurons Mediate Intestinal Propulsion in the Rat. James J. Galligan and Thomas F. Burks	594
Evaluation of the Role of <i>Alpha</i>-1 and <i>Alpha</i>-2 Adrenoceptors in the Maintenance of Neurogenic Tone to the Hindlimb Vasculature. Amin T. Hamed, Bhagavan S. Jandhyala and Mustafa F. Lokhandwala	599
Influence of Insulin on Urinary Eicosanoid Excretion in Rats with Experimental Diabetes Mellitus. J. Quilley and J. C. McGiff	606
Further Characterization of the Presynaptic <i>Alpha</i>-1 Receptor Modulating [³H]ACh Release from Rat Atria. Patrick M. McDonough, Glenn T. Wetzel and Joan Heller Brown	612
Irreversible Suppression of Calcium Entry into Nerve Terminals by Methylmercury. William D. Atchison, Urmila Joshi and John E. Thornburg	618
Activity of <i>Mu</i>- and <i>Delta</i>-Selective Opioid Agonists in the Guinea Pig Ileum Preparation: Differentiation into Peptide and Nonpeptide Classes with β-Funaltrexamine. Susan J. Ward, Diane LoPresti and Diane W. James	625
Lack of Pharmacodynamic Interactions between Quinidine and Digoxin in Isolated Atrial Muscle of Guinea Pig Heart. Joshua R. Berlin, Tai Akera and Theodore M. Brody	632
Pharmacokinetics and Dynamics of (\pm)-Verapamil in Lean and Obese Zucker Rats. Elizabeth L. Todd and Darrell R. Abernethy	642
A Reactive Metabolite of 1-Methyl-4-Phenyl-1,2,3,6-Tetrahydropyridine is Formed in Rat Brain <i>in vitro</i> by Type B Monoamine Oxidase. Giovanni U. Corsini, Stefano Pintus, Alberto Bocchetta, M. Paola Piccardi and Maria Del Zompo	648
A Dual Effect of Nonsteroidal Anti-Inflammatory Drugs on Renal Water Handling in Humans. Ullrich Schwertschlag, John G. Gerber, John S. Barnes and Alan S. Nies	653
Relationships between cyclic AMP Levels and Lipolysis in Fat Cells After Isoproterenol and Forskolin Stimulation. Donald O. Allen, Bilal Ahmed and Khalid Naseer	659
Effects of Hydralazine on Regional Blood Flow in Conscious Dogs. Jacques E. Chelly, Marie-Francoise Doursout, Bernard Begaud, C. C. Tsao and Craig J. Hartley	665
Vascular and Cardiac Effects of a New Dihydropyridine Derivative, YC-170: A Comparison with Bay K 8644. Yuichi Hattori, Haruaki Nakaya, Noritsugu Tohse and Morio Kanno	670
Adrenoceptor-Mediated Mechanical Responses of Canine Tracheal Smooth Muscle. J. Bergen and E. A. Kroeger	679
Inactivation and Induction of Cytochrome P-450 by Various Psoralen Derivatives in Rats. Philippe Letteron, Veronique Descatoire, Dominique Larrey, Marina Tinel, Jean Geneve and Dominique Pessayre	685
Pharmacological Studies on Stress-Induced Increase in Frontal Cortical Dopamine Metabolism in the Rat. Yves Claustre, Jean Paul Rivy, Trevor Dennis and Bernard Scatton	693
CH-38083, a Selective, Potent Antagonist of <i>Alpha</i>-2 Adrenoceptors. E. S. Vizi, L. G. Harsing Jr., J. Gaal, J. Kapocsi, S. Bernath and G. T. Somogyi	701
Possible Tubular Site of Action in Anesthetized Dogs of a Synthetic α-Human Atrial Natriuretic Polypeptide. Tokihito Yukimura, Katsuhiko Ito, Takaaki Takenaga, Kenjiro Yamamoto, Kenji Kangawa and Hisayuki Matsuo	707
Pharmacological Analysis of Autonomic Innervation of the Right Atria of Rats and Guinea Pigs: Demonstration of Nonadrenergic Noncholinergic Nerves. Akira Saito, Tomohisa Ishikawa, Tomoh Masaki, Sadao Kimura and Katsutoshi Goto	713
Light Microscopic Autoradiographic Localization of <i>Delta</i> Opioid Receptors in the Rat Brain Using a Highly Selective Bis-Penicillamine Cyclic Enkephalin Analog. Karoly Gulya, Donald R. Gehlert, James K. Wamsley, Henry Mosberg, Victor J. Hruby and Henry I. Yamamura	720
Carbamazepine and 10,11-Epoxycarbamazepine Produce Use- and Voltage-Dependent Limitation of Rapidly Firing Action Potentials of Mouse Central Neurons in Cell Culture. Michael J. McLean and Robert L. Macdonald	727
Pharmacological and Autoradiographic Discrimination of <i>Sigma</i> and Phencyclidine Receptor Binding Sites in Brain with (+)-[³H]SKF 10,047, (+)-[³H]-3-[3-Hydroxyphenyl]-N-(1-Propyl)Piperidine and [³H]-1-[1-(2-Thienyl)Cyclohexyl]Piperidine. Brian L. Largent, Andrew L. Gundlach and Solomon H. Snyder	739
<i>In Vivo</i> [³H]Flunitrazepam Binding: Imaging of Receptor Regulation. Brian J. Ciliax, John B. Penney, Jr. and Anne B. Young	749
Effects of Antidepressant Drugs Injected into the Amygdala on Behavioral Responses of Rats in the Forced Swim Test. G. E. Duncan, G. R. Breese, H. Criswell, W. E. Stumpf, R. A. Mueller and J. B. Covey	758