

The Journal of PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS

VOLUME 243
NOVEMBER 1987
NUMBER 2

CONTENTS

Effect of Platelet Activating Factor Antagonists on Cultured Rat Mesangial Cells. R. Neuwirth, P. Singhal, J. A. Satriano, P. Braquet and D. Schlondorff	409
Recovery of Chronotropic Responsiveness after Systemic 6-Hydroxydopamine Treatment: Studies in the Pithed Rat. Steven J. Fluharty, Regis R. Vollmer, Susan A. Myers, Monica J. McCann, Michael J. Zigmond and Edward M. Stricker	415
Differential Effects of Calcium Channel Blockers on Leukotriene C₄- and D₄-Induced Contractions in Guinea Pig Pulmonary Parenchymal Strips. Elliot Israel, Jean Louis Robin and Jeffrey M. Drazen	424
Different Affinity States of Alpha-1 Adrenergic Receptors Defined by Agonists and Antagonists in Bovine Aorta Plasma Membranes. G. Jagadeesh and R. C. Deth	430
Differential Effects of Pimozide and Clozapine on Schedule-Controlled and Schedule-Induced Behaviors after Acute and Chronic Administration. George L. Kaempf and Joseph H. Porter	437
Hemodynamic Pharmacology of p-Chloroamphetamine, a Serotonin Agonist, in Conscious Rats. Richard H. Alper, Chong Lee and Michael J. Brody	446
N,N'-Dicyclohexylcarbodiimide Inactivates Organic Cation Transport in Renal Brush Border Membranes. Paul P. Sokol, Peter D. Holohan and Charles R. Ross	455
Effect of Thromboxane Receptor Antagonists on Renal Artery Thrombosis in the Cynomolgus Monkey. W. A. Schumacher, H. J. Goldenberg, D. N. Harris and M. L. Ogletree	460
Is the Guinea Pig Trachea a Good <i>in Vitro</i> Model of Human Large and Central Airways? Comparison of Leukotriene-, Metacholine-, Histamine- and Antigen-Induced Contractions. Roseanna M. Muccitelli, Stephanie S. Tucker, Douglas W. P. Hay, Theodore J. Torphy and Martin A. Wasserman	467
Pharmacologic Profile of SK&F 104353: A Novel, Potent and Selective Peptidoleukotriene Receptor Antagonist in Guinea Pig and Human Airways. Douglas W. P. Hay, Roseanna M. Muccitelli, Stephanie S. Tucker, Lynne M. Vickery-Clark, Karen A. Wilson, John G. Gleason, Ralph F. Hall, Martin A. Wasserman and Theodore J. Torphy	474
Measurement of Antagonist Affinity for Purine Receptors of Drugs Producing Concomitant Phosphodiesterase Blockade: The Use of Pharmacologic Resultant Analysis. Terry P. Kenakin and Deborah Beek	482
Renal Response to 9α,11β-Prostaglandin F₂ in the Rat. Charles T. Stier, Jr., L. Jackson Roberts II and Patrick Y.-K. Wong	487
Peptide Opioid Antagonist Separates Peripheral and Central Opioid Antitransit Effects. Jennifer E. Shook, John T. Pelton, Victor J. Hruby and Thomas F. Burks	492
Somatostatin Effects on Gastric Electrolytes and Pepsin in Dogs with Various Secretory Stimuli. Basil I. Hirschowitz	501
Stimulation of Acetylcholine Release from Myenteric Neurons of Guinea Pig Small Intestine by Forskolin and cyclic AMP. William M. Yau, Jeanne A. Dorsett and Michael L. Youther	507
Prostaglandin E₂ and [¹⁴C]Arachidonic Acid Release by Carbachol in the Isolated Canine Parietal Cell. N. Ann Payne and John G. Gerber	511
Corticotropin-Releasing Factor Inhibits Thermal Injury. Juliann G. Kiang and E. T. Wei	517
Effect of Norepinephrine Uptake Blockade on Contractile Responses to Adrenergic Nerve Stimulation of Isolated Rat Blood Vessels: Influence of Age. Sue Piper Duckles	521
Effects of Agonists and Phorbol Esters on Adrenergic Receptors of DDT₁ MF-2 Cells. Matthew S. Cowlen and Myron L. Toews	527
Muscarine-Stimulated Neurotransmitter Release from PC12 Cells. Carolyn S. Rabe, Eleanor DeLorme and Forrest F. Weight	534
U-54494A: A Unique Anticonvulsant Related to Kappa Opioid Agonists. P. F. VonVoigtlander, E. D. Hall, M. Camacho Ochoa, R. A. Lewis and H. J. Triezenberg	542
<i>In Vitro</i> Pharmacology of ICI 198,615: A Novel, Potent and Selective Peptide Leukotriene Antagonist. D. W. Snyder, R. E. Giles, R. A. Keith, Y. K. Yee and R. D. Krell	548
<i>In Vivo</i> Pharmacology of ICI 198,615: A Novel, Potent and Selective Peptide Leukotriene Antagonist. R. D. Krell, R. E. Giles, Y. K. Yee and D. W. Snyder	557
Phenobarbital Induction and Acetaminophen Hepatotoxicity: Resistance in the Obese Zucker Rodent. Robert A. Blouin, Philip Dickson, Patrick J. McNamara, Michael Cibull and Craig McClain	565
Unmasking of Thrombin Vasoconstriction in Isolated Perfused Dog Hearts after Intracoronary Infusion of Air Embolus. David D. Ku	571
Alpha-1 Adrenoceptor-Induced Ca⁺⁺ Movements in Rat Aorta: Antagonism by Phenoxybenzamine and N-Ethoxycarbonyl-2-Ethoxy-1,2-Dihydroquinoline. Andrew T. Chiu, Pancras C. Wong and Pieter B. M. W. M. Timmermans	577

Contents Continued on iv

Cyclosporine A Inhibits Bone Resorption in Cultured Neonatal Mouse Calvaria. K. Klaushofer, O. Hoffmann, P. J. Stewart, E. Czerwenka, K. Koller, M. Peterlik and P. H. Stern	584
Differentiation between <i>Mu</i> and <i>Kappa</i> Receptor-Mediated Effects in Opioid Drug Discrimination: Apparent pA_2 Analysis. Albert J. Bertalmio and James H. Woods	591
Noncompetitive Blockade of Vasopressin-1 Receptors in Rat Tail Artery. Anthony W. Fox, Georgia Karapanos and William E. Mitch	598
Amino Acid Influences on Seizures Elicited Within the Inferior Colliculus. Thomas J. McCown, Bennet S. Givens and George R. Breese	603
Tetrahydroaminoacridine Blocks Potassium Channels and Inhibits Sodium Inactivation in <i>Myxicola</i>. Charles L. Schauf and Albert Sattin	609
Specific Actions of Gallium on Norepinephrine-Induced Tension and Associated ^{45}Ca Movements in Rabbit Aortic Smooth Muscle. Suraj S. Shetty and George B. Weiss	614
Regulation of Isoproterenol-Induced cyclic AMP Accumulation in LRM55 Glial Cells by Phosphodiesterase. Vergine Madelian and William Shain	618
M_2 Muscarinic Receptor Subtype is Associated with Inositol Trisphosphate Accumulation, Myosin Light Chain Phosphorylation and Contraction in Sphincter Smooth Muscle of Rabbit Iris. Rashid A. Akhtar, Richard E. Honkanen, Philip H. Howe and Ata A. Abdel-Latif	624
Increase in Ca^{++} Sensitivity of the Contractile System by MCI-154, a Novel Cardiotonic Agent, in Chemically Skinned Fibers from the Guinea Pig Papillary Muscles. Yoshimi Kitada, Akihiro Narimatsu, Noriko Matsumura and Makoto Endo	633
Does the Positive Inotropic Action of a Novel Cardiotonic Agent, MCI-154, Involve Mechanisms Other than cyclic AMP? Yoshimi Kitada, Akihiro Narimatsu, Reiko Suzuki, Masao Endoh and Norio Taira	639
Effects of Bay k 8644 and Nifedipine on Isolated Dog Cerebral, Coronary and Mesenteric Arteries. Masahisa Asano, Kyuzo Aoki, Yoshio Suzuki and Tomohiro Matsuda	646
Involvement of Adenosine in the Spinal Antinociceptive Effects of Morphine and Noradrenaline. M. I. Sweeney, T. D. White and J. Sawynok	657
Enantiomers of Thiorphan and Acetorphan: Correlation between Enkephalinase Inhibition, Protection of Endogenous Enkephalins and Behavioral Effects. Bruno Giros, Claude Gros, Jean-Charles Schwartz, Denis Danvy, Jean-Christophe Plaquevent, Lucette Duhamel, Pierre Duhamel, Adina Vlaiculescu, Jean Costentin and Jeanne-Marie Lecomte	666
Enkephalinase is Involved in the Degradation of Endogenous Substance P Released from Slices of Rat Substantia Nigra. Annie Mauborgne, Sylvie Bourgoin, Jean-Jacques Benoliel, Martin Hirsch, Jean-Luc Berthier, Michel Hamon and François Cesselin	674
Nicotine-Induced Release of Vasopressin in the Conscious Rat: Role of Opioid Peptides and Hemodynamic Effects. J. F. Aubert, M. Burnier, B. Waeber, J. Nussberger and H. R. Brunner	681
Acetylation of Acetylhydrazine, the Toxic Metabolite of Isoniazid, in Humans. Inhibition by Concomitant Administration of Isoniazid. Elmar Peretti, Georg Karlaganis and Bernhard H. Lauterburg	686
Capsaicin-Induced Corneal Lesions in Mice and the Effects of Chemical Sympathectomy. Takao Shimizu, Kanji Izumi, Shingo Fujita, Takeshi Koja, Masaru Sorimachi, Norio Ohba and Takeo Fukuda	690
Characterization of Histamine Receptors in Isolated Rabbit Veins. Hiromichi Tsuru, Shizuko Kohno, Masato Iwata and Tatsuro Shigei	696
Selective and Long-Lasting Inhibitory Actions of the Dihydropyridine Derivative, CV-4093, on Calcium Currents in Smooth Muscle Cells of the Rabbit Pulmonary Artery. Kohji Okabe, Kazumasa Terada, Kenji Kitamura and Hiroshi Kuriyama	703
Prolonged Depolarization Increases the Pharmacological Effect of Dihydropyridines and Their Binding Affinity for Calcium Channels of Vascular Smooth Muscle. Nicole Morel and Théophile Godfraind	711
Concentration-Dependent Effects of Prednisolone on Lymphocyte Subsets and Mixed Lymphocyte Culture in Humans. Berend Oosterhuis, Ineke J. M. ten Berge, Peter T. A. Schellekens and Chris J. van Boxtel	716
Intramural Nerve-Mediated Inotropic Responses of Left Atria of Rats and Guinea Pigs: Demonstration of <i>Alpha</i> Adrenergic and Nonadrenergic Noncholinergic Responses in Guinea Pigs. Katsutoshi Goto, Tomohisa Ishikawa, Sadao Kimura and Akira Saito	723
Role of Calcitonin Gene-Related Peptide as Cardiotonic Neurotransmitter in Guinea Pig Left Atria. Akira Saito, Tomohisa Ishikawa, Sadao Kimura and Katsutoshi Goto	731
Effects of <i>Kappa</i> Agonists and Dexoadrol on the Acquisition of Conditional Discriminations in Monkeys. Joseph M. Moerschbaeher, Cathy Brocklehurst, Carlos Devia and W. Bryant Faust	737
Inhibition of Cholesterol-Induced Atherosclerosis in Rabbits by Dimethyl Sulfoxide. A. F. Debons, K. Fani, F. A. Jimenez and M. L. Maayan	745
Diphenylthiazole-Induced Changes in Renal Ultrastructure and Enzymology: Toxicologic Mechanisms in Polycystic Kidney Disease? J. T. Hjelle, J. J. Hjelle, T. J. Maziasz and F. A. Carone	758
Effects of Anagrelide on Platelet cAMP Levels, cAMP-Dependent Protein Kinase and Thrombin-Induced Ca^{++} Fluxes. S. Seiler, A. J. Arnold, R. I. Grove, C. A. Fifer, S. L. Keely, Jr. and H. C. Stanton	767
Pharmacology of the Alkaloid Pumiliotoxin-B. II. Possible Involvement of Calcium and Sodium-Dependent Processes in Nerve and Skeletal Muscle. K. S. Rao, Jordan E. Warnick, John W. Daly and Edson X. Albuquerque	775
N-Methyl-D-Aspartate Receptors Mediate Hypoxic Neuronal Injury in Cortical Culture. Mark P. Goldberg, John H. Weiss, Phuong-Chi Pham and Dennis W. Choi	784
Dopaminergic Regulation of Tachykinin Metabolism in the Striatonigral Pathway. S. J. Li, S. P. Sivam, J. F. McGinty, Y. S. Huang and J. S. Hong	792