

VOLUME 237
MAY 1986
NUMBER 2

The Journal of PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS

CONTENTS

Inhibition of Guinea-Pig Oxyntic Cell Function by Adenosine and Prostaglandins. A. A. Heldsinger, A. I. Vinik and I. H. Fox	351
Antagonism of the Final Common Pathway of Mast Cell Histamine Secretion by Arylalkylamines. George W. Read and David Lagunoff	357
Norepinephrine-Sensitive, Phenoxybenzamine-Resistant Receptor Sites Associated with Contraction in Rabbit Arterial but Not Venous Smooth Muscle: Possible Role in Adrenergic Neurotransmission. I. Laher, M. A. Khayal and J. A. Bevan	364
Possible 5-Hydroxytryptamine₁ (5-HT₁) Receptor Involvement in the Stimulus Properties of 1-(<i>m</i>-Trifluoromethylphenyl)piperazine (TFMPP). K. A. Cunningham and J. B. Appel	369
Structural Modifications of Pro-Opiomelanocortin-Derived Peptides Alter their Behavioral Effects Markedly. Michael D. Hirsch and Thomas L. O'Donohue	378
Metaphit, a Proposed Phencyclidine Receptor Acylator: Phencyclidine-Like Behavioral Effects and Evidence of Absence of Antagonist Activity in Pigeons and in Rhesus Monkeys. Wouter Koek, James H. Woods, Arthur E. Jacobson, Kenner C. Rice and Ralph A. Lessor	386
Discriminative Stimulus Effects of Atypical Anxiolytics in Baboons and Rats. Nancy A. Ator and Roland R. Griffiths ..	393
Pharmacology of ORF 17578, a New Histamine H₂-Receptor Antagonist: Comparison with Cimetidine and Ranitidine. Laurence B. Katz, Cynthia K. Scott and David A. Shriver	404
[³H]Pirenzepine and (-)-[³H]Quinuclidinyl Benzilate Binding to Rat Cerebral Cortical and Cardiac Muscarinic Cholinergic Sites. I. Characterization and Regulation of Agonist Binding to Putative Muscarinic Subtypes. Mark Watson, Henry I. Yamamura and William R. Roeske	411
[³H]Pirenzepine and (-)-[³H]Quinuclidinyl Benzilate Binding to Rat Cerebral Cortical and Cardiac Muscarinic Cholinergic Sites. II. Characterization and Regulation of Antagonist Binding to Putative Muscarinic Subtypes. Mark Watson, William R. Roeske and Henry I. Yamamura	419
Central Opioid Receptors and Baroreflex Control of Sympathetic and Cardiovascular Function. Frank J. Gordon ...	428
Discriminative Stimulus Effects of the Opioid Antagonist Diprenorphine in the Squirrel Monkey. Sarah E. DeRossett and Stephen G. Holtzman	437
Stereoselective Behavioral Effects of the Isomers of Pentobarbital and Secobarbital in the Pigeon. Galen R. Wenger, James M. Donald and H. C. Cunny	445
Xylazine Emesis, Yohimbine and Motion Sickness Susceptibility in the Cat. James B. Lucot and George H. Crampton ..	450
Cellular Toxicity of Bromobenzene and Bromobenzene Metabolites to Rabbit Proximal Tubules: The Role and Mechanism of 2-Bromohydroquinone. Rick G. Schnellmann and Lazaro J. Mandel	456
Benzodiazepine Dependence in Mice after Ingestion of Drug-Containing Food Pellets. Edward J. Gallaher, Stephan A. Henauer, Christopher J. Jacques and Leo E. Hollister	462
Effects of γ-Aminobutyric Acid (GABA) Receptor Agonists on the Neurotoxicity and Anticonvulsant Activity of Barbiturates in Mice. Rafael A. Ulloque, Andrew Y. Chweh and Ewart A. Swinyard	468
Thromboxane Agonist (U46619) Potentiates Norepinephrine Efflux from Adrenergic Nerves. George J. Trachte ...	473
GABAergic Modulation of Inferior Colliculus Excitability: Role in the Ethanol Withdrawal Audiogenic Seizures. Gerald D. Frye, Thomas J. McCown, George R. Breese and Steven L. Peterson	478
Effect of Ethosuximide Alone and in Combination with γ-Aminobutyric Acid Receptor Agonists on Brain γ-Aminobutyric Acid Concentration, Anticonvulsant Activity and Neurotoxicity in Mice. E. Lin-Michell, A. Y. Chweh and E. A. Swinyard	486
Taurocholate and Steroid Glucuronides: Mutual Protection against Cholestasis in the Isolated Perfused Rat Liver. Sherrie Durham and Mary Vore	490

Contents Continued on iv

This One



03NX-LAL-1HC0

Inhibition of Amino Acid Transport by Nonsteroidal Anti-Inflammatory Drugs: A Model for Predicting Relative Therapeutic Potency. George F. Seng and Barbara M. Bayer	496
Two Bradykinin Binding Sites with Picomolar Affinities. Donald C. Manning, Raymond Vavrek, John M. Stewart and Solomon H. Snyder	504
Prostaglandin-E₂ Inhibition of Secretagogue-Stimulated [¹⁴C]Aminopyrine Accumulation in Rat Parietal Cells: A Model for Its Mechanism of Action. Gary C. Rosenfeld	513
Metabolism and Excretion of a Glutathione Conjugate of Acetaminophen in the Isolated Perfused Rat Kidney. John F. Newton, Diane Hoefle, Mark W. Gemborys, Gilbert H. Mudge and Jerry B. Hook	519
Prostaglandins Participate in the Renal Vasodilation due to Hydralazine in Dogs. Maret Panzenbeck, Arsenio Baez and Gabor Kaley	525
Depression of Contractile Responses in Rat Aorta by Spontaneously Released Endothelium-Derived Relaxing Factor. William Martin, Robert F. Furchgott, Gina M. Villani and Desingaro Jothianandan	529
Phosphodiesterase Inhibitors Induce Endothelium-Dependent Relaxation of Rat and Rabbit Aorta by Potentiating the Effects of Spontaneously Released Endothelium-Derived Relaxing Factor. William Martin, Robert F. Furchgott, Gina M. Villani and Desingaro Jothianandan	539
Contractions of Isolated Canine Coronary Arteries Resistant to S₂-Serotonergic Blockade. Richard A. Cohen	548
Analysis of Adrenoceptor Blockade and Hypotension Elicited by Urapidil and Prazosin in Conscious Rat. Joan Goering and Ben G. Zimmerman	553
Pharmacological Evidence That Human Intralobar Airways Do Not Contain Different Receptors That Mediate Contractions to Leukotriene C₄ and Leukotriene D₄. C. K. Buckner, R. D. Krell, R. B. Laravuso, D. B. Coursin, P. R. Bernstein and J. A. Will	558
Inhibition of High-Affinity Choline Uptake in the Rat Hippocampus by <i>in Vivo</i> Injection of Phenobarbital in the Medial Septum. Judith A. Richter and Joanne M. Gormley	563
Effects of Secretagogues on ATP Levels and Protein Carboxyl Methylation in Rat Brain Synaptosomes. Jay M. Bjorndahl and Charles O. Rutledge	569
Muscarinic Cholinergic Receptor Binding Sites Differentiated by Their Affinity for Pirenzepine Do Not Interconvert. Daniel W. Gil and Barry B. Wolfe	577
Pharmacokinetics of Melphalan in Isolated Perfusion of the Limbs. C. Benckhuijsen, F. J. Varossieau, A. A. M. Hart, J. Wieberdink and J. Noordhoek	583
Effects of Prostaglandin Synthesis Inhibition on Sympathetic- and Parasympathetic-Mediated Coronary Hemodynamic Responses. Bruno Trimarco, Alberto Cuocolo, Bruno Ricciardelli, Paola Patrignani, Massimo Volpe, Nicola de Luca and Mario Condorelli	589
Halothane-Cooling Contractures of Mammalian Muscles. R. T. Sudo, M. R. B. Souza, G. Zapata and G. Suarez-Kurtz	600
Biotransformation of Glyceryl Trinitrate Occurs Concurrently with Relaxation of Rabbit Aorta. James F. Brien, Brian E. McLaughlin, Todd H. Breedon, Brian M. Bennett, Kanji Nakatsu and Gerald S. Marks	608
Development and Application of a Specific Radioimmunoassay for Trifluoperazine N^{4'}-Oxide to a Kinetic Study in Humans. M. Aravagiri, E. M. Hawes and K. K. Midha	615
Furosemide Pharmacodynamics: Effect of Respiratory and Acid-Base Disturbances. Roberto Babini and Patrick du Souich	623
Requirement for Reduced, Unliganded Hemoprotein for the Hemoglobin- and Myoglobin-Mediated Biotransformation of Glyceryl Trinitrate. Brian M. Bennett, Susan M. Kobus, James F. Brien, Kanji Nakatsu and Gerald S. Marks	629
Competition of Organic Anions for Furosemide and <i>p</i>-Aminohippurate Secretion in the Rabbit. Jacques Bidiville and Françoise Roch-Ramel	636
Differential Pharmacology and Function of Two 5-HT₁ Receptors Modulating Transmitter Release in Rat Cerebellum. M. Raiteri, G. Maura, G. Bonanno and A. Pittaluga	644
Zolpidem, a Novel Nonbenzodiazepine Hypnotic. I. Neuropharmacological and Behavioral Effects. H. Depoortere, B. Zivkovic, K. G. Lloyd, D. J. Sanger, G. Perrault, S. Z. Langer and G. Bartholini	649
Zolpidem, a Novel Nonbenzodiazepine Hypnotic. II. Effects on Cerebellar Cyclic GMP Levels and Cerebral Monoamines. Bernard Scatton, Yves Claustre, Trevor Dennis and Toru Nishikawa	659
Effects of Thioglucoses on Sensitivity to Insulin Hypoglycemic Convulsions. Mary Ann Marrazzi, James A. Brown, Grace Yabut, Joyce Wright, Margaret Poscher, Paul Rauch, David Silverstein, Maria Liveriatos and Kathy W. Fish	666
Extracellular Calcium-Dependent and -Independent Effects of Methylmercury on Spontaneous and Potassium-Evoked Release of Acetylcholine at the Neuromuscular Junction. William D. Atchison	672
Characterization and Autoradiographic Visualization of (+)-[³H]SKF10,047 Binding in Rat and Mouse Brain: Further Evidence for Phencyclidine/"Sigma Opiate" Receptor Commonality. Ratna Sircar, Roxanne Nichtenhauser, John R. Ieni and Stephen R. Zukin	681