MOLECULAR PHARMACOLOGY

Contents

ACCELERATED COMMUNICATIONS

493	High Affinity Amylin Binding Sites in Rat Brain	Kevin Beaumont, Mary A. Kenney, Andrew A. Young, and Timothy J. Rink						
498	Anandamide, an Endogenous Cannabinoid, Inhibits Calcium Currents as a Partial Agonist in N18 Neuroblastoma Cells	Ken Mackie, William A. Devane, and Bertil Hille						
504	Differential Modulation by Cyclothiazide and Concanavalin A of Desensitization at Native α-Amino-3-hydroxy-5-methyl-4-isoxazolepropionic Acid- and Kainate-Preferring Glutamate Receptors	Linda A. Wong and Mark L. Mayer						
511	Role of the Aryl Hydrocarbon Receptor Nuclear Translocator Protein in Aryl Hydrocarbon (Dioxin) Receptor Action	Markus R. Probst, Suzanne Reisz-Porszasz, Rosally V. Agbunag, May S. Ong, and Oliver Hankinson						
519	Enhanced Stimulation by Ribavirin of the 5'-Phosphorylation and Anti-Human Immunodeficiency Virus Activity of Purine $2'-\beta$ -Fluoro-2', 3'-dideoxynucleosides	David G. Johns, Gurpreet S. Ahluwalia, David A. Cooney, Hiroaki Mitsuya, and John S. Driscoll						
ARTICLES								
524	Molecular Cloning and Functional Expression of a Sheep A_3 Adenosine Receptor with Widespread Tissue Distribution	Joel Linden, Heidi E. Taylor, Anna S. Robeva, Amy L. Tucker, Jörg H. Stehle, Scott A. Rivkees, J. Stephen Fink, and Steven M. Reppert						

Continued

MOLECULAR PHARMACOLOGY (MOL/ISSN 0026-895X) is an official publication of The American Society for Pharmacology and Experimental Therapeutics and is published monthly, two volumes a year, beginning in January and July, by Williams & Wilkins, 428 E. Preston St., Baltimore, MD 21202-3993. Second class postage paid at Baltimore, MD and at additional mailing offices. POSTMASTER: Send address changes to MOLECULAR PHARMACOLOGY, 428 E. Preston St., Baltimore, MD 21202-3993. Subscription Rates: U.S.: Personal \$105; Institutional \$230; Single copy \$19. Outside the U.S., except Japan: Personal \$135; Institutional \$260; Single copy \$23. Foreign prices exclude Japan. See Information for Subscribers for detailed instructions. The GST Tax Number for Canadian subscribers is 123394371. Country of origin USA. PRICES ARE SUBJECT TO CHANGE. Indexed by Index Medicus, Current Contents (Life Sciences), Excerpta Medica, Reference Update/Research Information Systems, and Current Awareness in Biological Sciences. Copyright © 1993 by The American Society for Pharmacology and Experimental Therapeutics.

533	Alternative Transcript of Nonselective-Type Endothelin Receptor from Rat Brain	Hwei-Fang Cheng, Yu-Ming Su, Jing-Ruey Yeh, and Kwen-Jen Chang
539	Characterization of Guinea Pig Pulmonary Neurokinin Type 1 Receptors using a Novel Antagonist Ligand, [3H]FK888	Kikuo Miyayasu, Judith C. W. Mak, Masanori Nishikawa, and Peter J. Barnes
545	Enkephalin Gene Transcription in Bovine Chromaffin Cells Is Regulated by Calcium and Protein Kinase A Signal Transduction Pathways: Identification of DNase I-Hypersensitive Sites	Linda MacArthur, Kerry J. Koller, and Lee E. Eiden
552	Pharmacological Characterization of N-Substituted Phenoxazines Directed toward Reversing Vinca Alkaloid Resistance in Multidrug-Resistant Cancer Cells	Julie K. Horton, Kuntebommanahalli N. Thimmaiah, Franklin C. Harwood, John F. Kuttesch, and Peter J. Houghton
560	Rat CYP1A1 Negative Regulatory Element: Biological Activity and Interaction with a Protein from Liver and Hepatoma Cells	Kenneth Sterling, James Weaver, Kai Ling Ho, Li Cheng Xu, and Edward Bresnick
569	β_2 -Adrenergic Receptor Mutants Reveal Structural Requirements for the Desensitization Observed with Long Term Epinephrine Treatment	Melissa A. Proll, Richard B. Clark, and R. W. Butcher
575	Dual Coupling of the Cloned Human 5-Hydroxytryptamine _{1D\alpha} and 5-Hydroxytryptamine _{1D\alpha} Receptors Stably Expressed in Murine Fibroblasts: Inhibition of Adenylate Cyclase and Elevation of Intracellular Calcium Concentrations via Pertussis Toxin-Sensitive G Protein(s)	John M. Zgombick, Laurence A. Borden, Tamara L. Cochran, Stefan A. Kucharewicz, Richard L. Weinshank, and Theresa A. Branchek
583	Use of Chimeric Musarinic Receptors to Investigate Epitopes Involved in Allosteric Interactions	John Ellis, Margaret Seidenberg, and Mark R. Brann
589	Characterization of the α_{1A} -Adrenoceptors of Guinea Pig Liver Membranes: Studies Using 5-[3 H] Methylurapidil	J. Adolfo García-Sáinz and M. Teresa Romero-Avila
595	Benzoquinoid Tyrosine Kinase Inhibitors Are Potent Blockers of Cardiac Muscarinic Receptor Function	Angela de S. Otero and Nicole M. Sweitzer
605	Lysophospholipid-Mediated Inhibition of Na ⁺ ,K ⁺ -Adenosine Triphosphatase Is a Possible Mechanism of Immunosuppressive Activity of Cyclosporin A	Ronald Anderson, Michiel J. Smit, and Constance E. J. Van Rensburg
615	Characterization of Endothelial Amino Acid Transport Systems Involved in the Actions of Nitric Oxide Synthase Inhibitors	Kurt Schmidt, Peter Klatt, and Bernd Mayer

CONTENTS (cont'd)

622	3-Isobutyl-1-methylxanthine Inhibits Sustained Calcium Current Independently of Cyclic AMP in Neuronal and Endocrine Cells	Steven M. Simasko and Shaochun Yan				
628	Positive Modulation of Human γ -Aminobutyric Acid Type A and Glycine Receptors by the Inhalation Anesthetic Isoflurane	Neil L. Harrison, J. L. Kugler, Mathew V. Jones, Eric P. Greenblatt, and Dolan B. Pritchett				
633	Kinetic and Equilibrium Characterization of Vesamicol Receptor-Ligand Complexes with Picomolar Dissociation Constants	Gary A. Rogers, Wayne D. Kornreich, Kieran Hand, and Stanley M. Persons				
642	Verapamil Blocks a Rapidly Activating Delayed Rectifier K ⁺ Channel Cloned from Human Heart	David Rampe, Barbara Wible, David Fedida, Richard C. Dage, and Arthur M. Brown				
649	Transfected D_2 Short Dopamine Receptors Inhibit Voltage-Dependent Potassium Current in Neuroblastoma \times Glioma Hybrid (NG108–15) Cells	Miguel A. Castellano, Li-Xin Liu, Frederick J. Monsma, Jr., David R. Sibley, Gregory Kapatos, and Louis A. Chiodo				
657	Mapping of Ligand Binding Sites of Neuronal Nicotinic Acetylcholine Receptors Using Chimeric α Subunits	Charles W. Luetje, Marietta Piattoni, and Jim Patrick				
667	Structural Determinants of Quarternary Ammonium Blockers for Batrachotoxin-Modified Na ⁺ Channels	Ging Kuo Wang, Rachelle Simon, Donna Bell, Wai Man Mok, and Sho-Ya Wang				
	CORRECTIONS					
677	Development of Polyclonal Anti-D2 Dopamine Receptor Antibodies Using Sequence-Specific Peptides	Virginia A. Boundy, Robert R. Luedtke, Roman P. Artymyshyn, Theresa M. Filtz, and Perry B. Molinoff				
677	Mechanism of Hepatic Cytochrome P450 Modulation during <i>Listeria monocytogenes</i> Infection in Mice	Steven G. Armstrong and Kenneth W. Renton				
678	Commentary: Presence of α -Cobratoxin and Phospholipase A_2 Activity in Thymopoietin Preparations	M. Quik, R. G. Cook, F. Revah, JP. Changeux, and J. Patrick				
RETRACTION LETTERS						
680	Thymopoietin, a Thymic Polypeptide Regulates Nicotinic α -Bungarotoxin Sites in Chromaffin Cells in Culture	M. Quik, R. Afar, S. Geertsen, T. Audhya, G. Goldstein, and J. M. Trifaro				

680	Thym	opoieti	n, a	Poten	t An	tagonist at	Nicotinic
	_		~-		~ .	. ~ .	

Receptors in C2 Muscle Cell Cultures

680 Interactions of the Thymic Polypeptide Hormone

Thymopoietin with Neuronal Nicotinic

 α -Bungarotoxin Binding Sites and with Muscle-

Type, But Not Ganglia-Type, Nicotinic

Acetylcholine Receptor Ligand-Gated Ion Channels

M. Quik, H. El-Bizri, T. Audhya, and G. Goldstein

Ronald J. Lukas, Tapan Audhya, Gideon Goldstein, and

Linda Lucero