# MOLECULAR PHARMACOLOGY

## Contents

### ACCELERATED COMMUNICATIONS

1. Novel Action of Nitric Oxide as Mediator of \(N\)-Methyl-d-aspartate-Induced Phosphatidylinositol Hydrolysis in Neonatal Rat Cerebellum  
   Sheryl S. Smith and Jun Li

6. Tetrahydrobiopterin Is Required for Cytokine-Induced Nitric Oxide Production in a Murine Macrophage Cell Line (RAW 264)  
   Naoki Sakai, Seymour Kaufman, and Sheldon Milstien

11. A Single Conservative Amino Acid Substitution in the Reverse Transcriptase of Human Immunodeficiency Virus-1 Confers Resistance to \((+)-(5S)-4,5,6,7\)-Tetrahydro-5-methyl-6-(3-methyl-2-butenyl)imidazo[4,5,1-\(jk\)][1,4]benzodiazepin-2(1H)-thione (TIBO R82150)  
   John W. Mellors, Guang-jin Im, Enzo Tramontano, Susan R. Winkler, Daniel J. Medina, Ginger E. Dutschman, Hengameh Z. Bazmi, Giovanna Piras, Charles J. Gonzalez, and Yung-chi Cheng

### ARTICLES

17. Solubilization of the Cannabinoid Receptor from Rat Brain and Its Functional Interaction with Guanine Nucleotide-Binding Proteins  
   Devin B. Houston and Allyn C. Howlett

23. Molecular Characterization of \(\alpha_2\)-Adrenergic Receptors Regulating Intestinal Electrolyte Transport  
   Keith R. Hildebrand, Gaofeng Lin, Michael P. Murtaugh, and David R. Brown

30. Crystal-Induced Protein Tyrosine Phosphorylation in Neutrophils and the Effect of a Tyrosine Kinase Inhibitor on Neutrophil Responses  
   Helen M. Burt, John K. Jackson, Peter Dryden, and Hassan Salari

*continued*
CONTENTS (cont'd)

37 High-Dose Chemotherapy-Induced Platelet Defect: Inhibition of Platelet Signal Transduction Pathways
   Linda Karolak, Anita Chandra, Wasiuddin Khan, Ben Marks, William P. Petros, William P. Peters, Charles S. Greenberg, and Yusuf A. Hannun

45 Cellular Pharmacology of Phosphorothioate Homooligodeoxynucleotides in Human Cells
   Wen-Yi Gao, Christy Storm, William Egan, and Yung-chi Cheng

51 Estradiol Induction of Rhodamine 123 Efflux and the Multidrug Resistance Pump in Rat Pituitary Tumor Cells
   Erik M. Jancis, Rocco Carbone, Karen J. Loechner, and Priscilla S. Dannies

57 Effects of 3'-Azido-3'-deoxythymidine Metabolites on Simian Virus 40 Origin-Dependent Replication and Heteroduplex Repair in HeLa Cell Extracts
   Katarzyna Bebenek, David C. Thomas, John D. Roberts, Fritz Eckstein, and Thomas A. Kunkel

64 Modulation of Tumor Necrosis Factor-α, Interleukin-1β, Interleukin-6, Interleukin-8, and Granulocyte/Macrophage Colony-Stimulating Factor Expression in Human Monocytes by an Endogenous Anxiogenic Benzodiazepine Ligand, Triakontatetraneuropeptide: Evidence for a Role of Prostaglandins
   Véronique Taupin, Jean Gogusev, Béatrice Descamps-Latscha, and Flora Zavala

70 Sequence Analysis and Expression of the cDNA for the Phenol-Sulfating Form of Human Liver Phenol Sulfotransferase
   Teresa W. Wilborn, Kathleen A. Comer, Thomas P. Dooley, Ilene M. Reardon, Robert L. Heinrikson, and Charles N. Falany

78 Hallucinogenic Receptor Models: Interaction of Imidazolium Chloride with Amphetamine Analogs
   Alexandros Makriyannis, Christine M. DiMeglio, Adrie P. DeJong, and Sonya El-Khateeb

84 Repeated Administration of SR 46349B, A Selective 5-Hydroxytryptamine2 Antagonist Up-regulates 5-Hydroxytryptamine2 Receptors in Mouse Brain

90 Muscarinic Receptor-Mediated Inhibition of GDP-Activated Adenylyl Cyclase Suggests a Direct Interaction of Inhibitory Guanine Nucleotide-Binding Proteins and Adenylyl Cyclase
   F. Niroomand, M. Bangert, C. Philipps, and B. Rauch

96 Calcium Channel Current in Cultured Rat Mesangial Cells
   Matomo Nishio, Hirokazu Tsukahara, Masahiro Hiraoka, Masakatsu Sudo, Shigeru Kigoshi, and Ikunobu Muramatsu

Continued
<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Zinc Modulation of Drug Binding, Cocaine Affinity States, and Dopamine Uptake on the Dopamine Uptake Complex</td>
<td>Eric K. Richfield</td>
</tr>
<tr>
<td>109</td>
<td>Human Immunodeficiency Virus Type 1-Specific [2',5'-Bis-O-(tert-butyldimethylsilyl)-β-d-ribofuranosyl]-3'-spiro-5''-(4''-amino-1''2''-oxathiole-2''-dioxide)-Purine Analogues Show a Resistance Spectrum that Is Different from that of the Human Immunodeficiency Virus Type I-Specific Non-nucleoside Analogues</td>
<td>Jan Balzarini, Sonsoles Velazquez, Ana San-Felix, Anna Karlsson, Maria-Jesus Perez-Perez, Maria-Jose Camarasa, and Erik De Clercq</td>
</tr>
<tr>
<td>115</td>
<td>4-Methylpyrazole Inhibits Fatty Acyl Coenzyme A Synthetase and Diminishes Catalase-Dependent Alcohol Metabolism: Has the Contribution of Alcohol Dehydrogenase to Alcohol Metabolism Been Previously Overestimated?</td>
<td>Blair U. Bradford, Donald T. Forman, and Ronald G. Thurman</td>
</tr>
<tr>
<td>120</td>
<td>Identification and Characterization of the Cytochrome P450 Enzymes Involved in N-Dealkylation of Propafenone: Molecular Base for Interaction Potential and Variable Disposition of Active Metabolites</td>
<td>Sigrid Botsch, Jean-Charles Gautier, Philippe Beaune, Michel Eichelbaum, and Heyo K. Kroemer</td>
</tr>
</tbody>
</table>