MINIREVIEW

Vitamin E Analogs, a Novel Group of “Mitocans,” as Anticancer Agents: The Importance of Being Redox-Silent

Jiri Neuzil, Marco Tomasetti, Yan Zhao, Lan-Feng Dong, Marc Birringer, Xiu-Fang Wang, Pauline Low, Kun Wu, Brian A. Salvatore, and Steven J. Ralph

1185

PERSPECTIVES

Missing Links: Mechanisms of Protean Agonism

Richard R. Neubig

1200

The Thrill Can Kill: Murder by Methylation

Sailen Barik

1203

All Aglow about Presynaptic Receptor Regulation of Neurotransmitter Transporters

Randy D. Blakely and Louis J. DeFelice

1206

ACCELERATED COMMUNICATIONS

Activation of TRPA1 Channels by the Fatty Acid Amide Hydrolase Inhibitor 3′-Carbamoylbiphenyl-3-yl cyclohexylcarbamate (URB597)

Wende Niforatos, Xu-Feng Zhang, Marc R. Lake, Karl A. Walter, Torben Neelands, Thomas F. Holzman, Victoria E. Scott, Connie R. Faltynek, Robert B. Moreland, and Jun Chen

1209

Extracellular Signal-Regulated Kinase Is an Endogenous Signal Retaining the Nuclear Constitutive Active/Androstane Receptor (CAR) in the Cytoplasm of Mouse Primary Hepatocytes

Chika Koike, Rick Moore, and Masahiko Negishi

1217

ARTICLES

D₂ Receptors Regulate Dopamine Transporter Function via an Extracellular Signal-Regulated Kinases 1 and 2-Dependent and Phosphoinositide 3 Kinase-Independent Mechanism


1222

The ©, ◊, and © symbols in the table of contents identify articles discussed in the Perspectives.
Reversal of Stathmin-Mediated Resistance to Paclitaxel and Vinblastine in Human Breast Carcinoma Cells
Elizabeth Alli, Jin-Ming Yang, James M. Ford, and William N. Hait

Solute-Inhibitor Interactions in the Plasmodial Surface Anion Channel Reveal Complexities in the Transport Process
Godfrey Lisk, Seth Scott, Tsione Solomon, Ajay D. Pillai, and Sanjay A. Desai

A Widely Used Retinoic Acid Receptor Antagonist Induces Peroxisome Proliferator-Activated Receptor-γ Activity
Michael Schupp, Joshua C. Curtin, Roy J. Kim, Andrew N. Billin, and Mitchell A. Lazar

Synergistic Neuroprotection by Bis(7)-tacrine via Concurrent Blockade of N-Methyl-D-aspartate Receptors and Neuronal Nitric-Oxide Synthase
Wenming Li, Jian Xue, Chunying Niu, Hongjun Fu, Colin S. C. Lam, Jialie Luo, Hugh H. N. Chan, Huaiguo Xue, Kelvin K. W. Kan, Nelson T. K. Lee, Chaoying Li, Yuanping Pang, Mingtao Li, Karl W. K. Tsim, Hualiang Jiang, Kaixian Chen, Xiaoyuan Li, and Yifan Han

Domains Necessary for Go12 Binding and Stimulation of Protein Phosphatase-2A (PP2A): Is Go12 a Novel Regulatory Subunit of PP2A?
Deguang Zhu, Robert I. Tate, Ralf Ruediger, Thomas E. Meigs, and Bradley M. Denker

Insulin Increases the Potency of Glycine at Ionotropic Glycine Receptors
Valerie B. Caraiscos, Robert P. Bonin, J. Glen Newell, Elzbieta Czerwinska, John F. Macdonald, and Beverley A. Orser

Analogs of Methyllycaconitine as Novel Noncompetitive Inhibitors of Nicotinic Receptors: Pharmacological Characterization, Computational Modeling, and Pharmacophore Development

Vitamin D3 Derivatives with Adamantane or Lactone Ring Side Chains are Cell Type-Selective Vitamin D Receptor Modulators
Yuka Inaba, Keiko Yamamoto, Nobuko Yoshimoto, Manabu Matsunawa, Shigeyuki Uno, Sachiko Yamada, and Makoto Makishima

Agonist-Driven Conformational Changes in the Inner β-Sheet of α7 Nicotinic Receptors
James T. McLaughlin, Jie Fu, and Robert L. Rosenberg

Maternal Cocaine Administration Causes an Epigenetic Modification of Protein Kinase Cε Gene Expression in Fetal Rat Heart
Haitao Zhang, Agus Darwanto, Thomas A. Linkhart, Lawrence C. Sowers, and Lubo Zhang

Real-Time Analysis of Agonist-Induced Activation of Protease-Activated Receptor 1/Go1 Protein Complex Measured by Bioluminescence Resonance Energy Transfer in Living Cells
Mohammed A. Ayoub, Damien Maurel, Virginie Binet, Michel Fink, Laurent Prézeau, Hervé Ansanay, and Jean-Philippe Pin

Conformationally Sensitive Reactivity to Permeant Sulfhydryl Reagents of Cysteine Residues Engineered into Helical Hairpin 1 of the Glutamate Transporter GLT-1
Irina Shlaifer and Baruch I. Kanner

Protean Agonism at the Dopamine D2 Receptor: (S)-3-(3-Hydroxyphenyl)-N-propylpiperidine Is an Agonist for Activation of Go1 but an Antagonist/Inverse Agonist for Gi1, Gi2, and Gi3
J. Robert Lane, Ben Powney, Alan Wise, Steven Rees, and Graeme Milligan

Identification of a Second Blocker Binding Site at the Cyttoplasmic Mouth of the Cystic Fibrosis Transmembrane Conductance Regulator Chloride Channel Pore
Chantal N. St. Aubin, Jing-Jun Zhou, and Paul Linsdell
Molecular Signalling Mediating the Protective Effect of A<sub>1</sub> Adenosine and mGlu3 Metabotropic Glutamate Receptor Activation against Apoptosis by Oxygen/Glucose Deprivation in Cultured Astrocytes
Renata Ciccarelli, Iolanda D’Alimonte, Patrizia Ballerini, Mariagrazia D’Auro, Eleonora Nargi, Silvana Buccella, Patrizia Di Iorio, Valeria Bruno, Ferdinando Nicoletti, and Francesco Caciagli

A Critical Role of Luteolin-Induced Reactive Oxygen Species in Blockage of Tumor Necrosis Factor-Activated Nuclear Factor-κB Pathway and Sensitization of Apoptosis in Lung Cancer Cells
Wei Ju, Xia Wang, Honglian Shi, Wenshu Chen, Steven A. Belinsky, and Yong Lin

Interaction of Novel Positive Allosteric Modulators of Metabotropic Glutamate Receptor 5 with the Negative Allosteric Antagonist Site Is Required for Potentiation of Receptor Responses
Yelin Chen, Yi Nong, Cyril Goudet, Kamondanai Hemstapat, Tomas de Paulis, Jean-Philippe Pin, and P. Jeffrey Conn

PAR1, but Not PAR4, Activates Human Platelets through a G<sub>i/o</sub>/Phosphoinositide-3 Kinase Signaling Axis
Bryan Voss, Joseph N. McLaughlin, Michael Holinstat, Roy Zent, and Heidi E. Hamm

Activation of Single Nicotinic Receptor Channels from Caenorhabditis elegans Muscle
Diego Rayes, Marina Flamini, Guillermiina Hernando, and Cecilia Bouzat

Quantitative Evaluation of Human δ Opioid Receptor Desensitization Using the Operational Model of Drug Action

Post-Transcriptional Regulation of Human Inducible Nitric-Oxide Synthase Expression by the Jun N-terminal Kinase
Riku Korhonen, Katrin Linker, Andrea Pautz, Ulrich Förstermann, Eeva Moilanen, and Hartmut Kleinert

Antiproliferative Mechanisms of a Transcription Factor Decoy Targeting Signal Transducer and Activator of Transcription (STAT) 3: The Role of STAT1
Vivian Wai Yan Lui, Amanda L. Boehm, Priya Koppikar, Rebecca J. Leeman, Daniel Johnson, Micheline Ogagan, Erin Childs, Maria Freilino, and Jennifer Rubin Grandis

Correction to “A Pair-Feeding Study Reveals That a Y5 Antagonist Causes Weight Loss in Diet-Induced Obese Mice by Modulating Food Intake and Energy Expenditure”

Supplemental material is available online at http://molpharm.aspetjournals.org.

About the cover: Overall alignment of all 67 compounds used in generating 3D-QSAR models. See the article by McKay et al. on page 1288 of this issue.