

MOLECULAR PHARMACOLOGY

November 2009

Volume 76

Number 5

<http://molpharm.aspetjournals.org>


ISSN 0026-895X

MINIREVIEW

- Adenylyl Cyclase–A-kinase Anchoring Protein Complexes: The Next Dimension in cAMP Signaling
Carmen W. Dessauer





935

PERSPECTIVE

- An Ion Channel Hypothesis to Explain Divergent Cardiovascular Safety of Cyclooxygenase-2 Inhibitors:
The Answer to a Hotly Debated Puzzle? 
Mark S. Shapiro

942

ARTICLES

-  Identification of Compounds that Correlate with ABCG2 Transporter Function in the National Cancer Institute Anticancer Drug Screen
John F. Deeken, Robert W. Robey, Suneet Shukla, Kenneth Steadman, Arup R. Chakraborty, Balasubramanian Poonkuzhali, Erin G. Schuetz, Susan Holbeck, Suresh V. Ambudkar, and Susan E. Bates
- 946
-  Targeting of the Akt-Nuclear Factor- κ B Signaling Network by [1-(4-Chloro-3-nitrobenzenesulfonyl)-1H-indol-3-yl]-methanol (OSU-A9), a Novel Indole-3-Carbinol Derivative, in a Mouse Model of Hepatocellular Carcinoma
Hany A. Omar, Aaron M. Sargeant, Jing-Ru Weng, Dasheng Wang, Samuel K. Kulp, Tushar Patel, and Ching-Shih Chen
- 957
- Potential Use of Cetrimonium Bromide as an Apoptosis-Promoting Anticancer Agent for Head and Neck Cancer
Emma Ito, Kenneth W. Yip, David Katz, Sonali B. Fonseca, David W. Hedley, Sue Chow, G. Wei Xu, Tabitha E. Wood, Carlo Bastianutto, Aaron D. Schimmer, Shana O. Kelley, and Fei-Fei Liu
- 969
-  Plasma Membrane Nucleolin Is a Receptor for the Anticancer Aptamer AS1411 in MV4-11 Leukemia Cells
Sridharan Soundararajan, Li Wang, Vijayalakshmi Sridharan, Weiwei Chen, Nigel Courtenay-Luck, David Jones, Eleanor K. Spicer, and Daniel J. Fernandes
- 984
-  Altered G-Protein Coupling in an mGluR6 Point Mutant Associated with Congenital Stationary Night Blindness
Donald Beqollari, Matthew J. Betzenhauser, and Paul J. Kammermeier
- 992

The  symbols in the table of contents identify articles discussed in the *Perspective*.

Molecular Pharmacology (ISSN 0026-895X) is published monthly (two volumes per year beginning in January and July) by the American Society for Pharmacology and Experimental Therapeutics, 9650 Rockville Pike, Bethesda, MD 20814-3995; e-mail: subscriptions@aspet.org; web site: aspet.org. Periodicals postage paid at Bethesda, MD, and at additional mailing offices. POSTMASTER: Send address changes to *Molecular Pharmacology*, 9650 Rockville Pike, Bethesda, MD 20814-3995. Subscription rates: U.S.: \$686.00; outside the U.S.: \$778.00. Single copy: \$60.00. GST Tax Number for Canadian sub-

scribers: BN:13489 2330 RT. Indexed or abstracted by *Biochemistry & Biophysics Citation Index*®, *Biological Abstracts*, *Current Awareness in Biological Sciences*, *Current Contents*®/Life Sciences, *EMBASE/Excerpta Medica*, *Index Medicus*, *Medical Documentation Service*®, *Reference Update*®, *Research Alert*®, *Science Citation Index*®, and *SciSearch*®. Copyright © 2009 by the American Society for Pharmacology and Experimental Therapeutics. All rights reserved. Printed in the U.S.A.

- S Bid and Calpains Cooperate to Trigger Oxaliplatin-Induced Apoptosis of Cervical Carcinoma HeLa Cells
Sergio Anguissola, Barbara Köhler, Robert O'Byrne, Heiko Düsselmann, Mary D. Cannon, Frank E. Murray, Caoimhin G. Concannon, Markus Rehm, Donat Kögel, and Jochen H. M. Prehn 998
- tert*-Butylphenylacetylene Is a Potent Mechanism-Based Inactivator of Cytochrome P450 2B4: Inhibition of Cytochrome P450 Catalysis by Steric Hindrance
Haoming Zhang, Hsia-lien Lin, Vyvya J. Walker, Djemel Hamdane, and Paul F. Hollenberg 1011
- Interactions of Histamine H₁-Receptor Agonists and Antagonists with the Human Histamine H₄-Receptor
Karl-Friedrich Deml, Silke Beermann, Detlef Neumann, Andrea Strasser, and Roland Seifert 1019
- S Functional Characterization of Human Cytochrome P450 2S1 Using a Synthetic Gene-Expressed Protein in *Escherichia coli*
Peter H. Bui and Oliver Hankinson 1031
- Fatty Acid Hydroperoxides Support Cytochrome P450 2S1-Mediated Bioactivation of Benzo[a]pyrene-7,8-dihydrodiol
Peter H. Bui, Erin L. Hsu, and Oliver Hankinson 1044
- S Differential Effects of Selective Cyclooxygenase-2 Inhibitors on Vascular Smooth Muscle Ion Channels May Account for Differences in Cardiovascular Risk Profiles
Liubov I. Brueggemann, Alexander R. Mackie, Bharath K. Mani, Leanne L. Cribbs, and Kenneth L. Byron 1053
- Vitamin D₃ and Its Nuclear Receptor Increase the Expression and Activity of the Human Proton-Coupled Folate Transporter
Jyrki J. Eloranta, Zoulikha M. Zaïr, Christian Hiller, Stephanie Häusler, Bruno Stieger, and Gerd A. Kullak-Ublick 1062
- S Three Epigenetic Drugs Up-Regulate Homeobox Gene *Rhox5* in Cancer Cells through Overlapping and Distinct Molecular Mechanisms
Qiang Li, David L. Bartlett, Michael C. Gorry, Mark E. O'Malley, and Z. Sheng Guo 1072
- Caveolin-1 and Lipid Microdomains Regulate G_s Trafficking and Attenuate G_s/Adenylyl Cyclase Signaling
John A. Allen, Jiang Z. Yu, Rahul H. Dave, Anushree Bhatnagar, Bryan L. Roth, and Mark M. Rasenick 1082
- High-Throughput Screening Reveals a Small-Molecule Inhibitor of the Renal Outer Medullary Potassium Channel and Kir7.1
L. Michelle Lewis, Gautam Bhawe, Brian A. Chauder, Sreedatta Banerjee, Katharina A. Lornsen, Rey Redha, Katherine Fallen, Craig W. Lindsley, C. David Weaver, and Jerod S. Denton 1094
- Regulation of the CYP3A4 and CYP3A7 Promoters by Members of the Nuclear Factor I Transcription Factor Family
Amanda K. Riffel, Eric Schuenemann, and Carrie A. Vyhldal 1104
- S Mechanisms Underlying Activation of Soluble Guanylate Cyclase by the Nitroxyl Donor Angeli's Salt
Andreas Zeller, M. Verena Wenzl, Matteo Beretta, Heike Stessel, Michael Russwurm, Doris Koesling, Kurt Schmidt, and Bernd Mayer 1115
- Protein Kinase A and B-Raf Mediate Extracellular Signal-Regulated Kinase Activation by Thyrotropin
Lisa A. Vuchak, Oxana M. Tsygankova, Gregory V. Prendergast, and Judy L. Meinkoth 1123
- S Supplemental material is available online at <http://molpharm.aspetjournals.org>.