

MOLECULAR PHARMACOLOGY

November 2013

Volume 84

Number 5

molpharm.aspetjournals.org

ISSN 1521-0111

MINIREVIEW

Molecular Pharmacology of ABCG2 and Its Role in Chemoresistance

Alexandra E. Stacy, Patric J. Jansson, and Des R. Richardson

655

ARTICLES

Functional Validation of Virtual Screening for Novel Agents with General Anesthetic Action at Ligand-Gated Ion Channels

Stephanie A. Heusser, Rebecca J. Howard, Cecilia M. Borghese, Madeline A. Cullins, Torben Broemstrup, Ui S. Lee, Erik Lindahl, Jens Carlsson, and R. Adron Harris

670

Importance of UDP-Glucuronosyltransferase 1A1 Expression in Skin and Its Induction by UVB in Neonatal Hyperbilirubinemia

Kyohei Sumida, Makiko Kawana, Emi Kouno, Tomoo Itoh, Shuhei Takano, Tomoya Narawa, Robert H. Tukey, and Ryoichi Fujiwara

679

Caged Naloxone Reveals Opioid Signaling Deactivation Kinetics

Matthew R. Banghart, John T. Williams, Ruchir C. Shah, Luke D. Lavis, and Bernardo L. Sabatini

687

Ursodeoxycholy l Lysophosphatidylethanolamide Inhibits Lipoapoptosis by Shifting Fatty Acid Pools toward Monosaturated and Polyunsaturated Fatty Acids in Mouse Hepatocytes

Walee Chamulitrat, Gerhard Liebisch, Weihong Xu, Hongying Gan-Schreier, Anita Pathil, Gerd Schmitz, and Wolfgang Stremmel

696

The Pharmacology of TUG-891, a Potent and Selective Agonist of the Free Fatty Acid Receptor 4 (FFA4/GPR120), Demonstrates Both Potential Opportunity and Possible Challenges to Therapeutic Agonism

Brian D. Hudson, Bharat Shimpukade, Amanda E. Mackenzie, Adrian J. Butcher, John D. Pediani, Elisabeth Christiansen, Helen Heathcote, Andrew B. Tobin, Trond Ulven, and Graeme Milligan

710

MONNA, a Potent and Selective Blocker for Transmembrane Protein with Unknown Function 16/Anoctamin-1

Soo-Jin Oh, Seok Jin Hwang, Jonghoon Jung, Kuai Yu, Jeongyeon Kim, Jung Yoon Choi, H. Criss Hartzell, Eun Joo Roh, and C. Justin Lee

726

Flavanones That Selectively Inhibit TRPM3 Attenuate Thermal Nociception In Vivo

Isabelle Straub, Ute Krügel, Florian Mohr, Jens Teichert, Oleksandr Rizun, Maik Konrad, Johannes Oberwinkler, and Michael Schaefer

736

Sequential Cytoprotective Responses to Sigma1 Ligand-Induced Endoplasmic Reticulum Stress

Joel M. Schrock, Christina M. Spino, Charles G. Longen, Stacy M. Stabler, Jacqueline C. Marino, Gavril W. Pasternak, and Felix J. Kim

751

Subtype-Selective Activation of K_v7 Channels by AaTXK β ₍₂₋₆₄₎, a Novel Toxin Variant from the *Androctonus australis* Scorpion Venom

Zied Landoulsi, Francesco Miceli, Angelo Palmese, Angela Amoresano, Gennaro Marino, Mohamed El Ayeb, Maurizio Tagliatela, and Rym Benkhalifa

763

Acetaminophen Modulates P-Glycoprotein Functional Expression at the Blood-Brain Barrier by a Constitutive Androstane Receptor–Dependent Mechanism

Lauren M. Slosky, Brandon J. Thompson, Lucy Sanchez-Covarrubias, Yifeng Zhang, Mei-Li Laracuenta, Todd W. Vanderah, Patrick T. Ronaldson, and Thomas P. Davis

774

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

About the cover: Disruption of modulation by propofol site mutagenesis. See the article by Heusser et al. on page 670 of this issue.