

MOLECULAR PHARMACOLOGY

March 2015

Volume 87

Number 3

molpharm.aspetjournals.org

ISSN 1521-0111

MINIREVIEW

- Adenosine Monophosphate-Activated Kinase and Its Key Role in Catabolism: Structure, Regulation, Biological Activity, and Pharmacological Activation
Sukriti Krishan, Des R. Richardson, and Sumit Sahni 363

ARTICLES

- Enoxaparin Sensitizes Human Non-Small-Cell Lung Carcinomas to Gefitinib by Inhibiting DOCK1 Expression, Vimentin Phosphorylation, and Akt Activation
Yan Pan, Xin Li, Jianhui Duan, Lan Yuan, Shengjun Fan, Jingpu Fan, Yilixiati Xiaokaiti, Haopeng Yang, Yefan Wang, and Xuejun Li 378
- Neurotransmitter GABA Activates Muscle but Not $\alpha 7$ Nicotinic Receptors
Leonardo Dionisio, Ignacio Bergé, Matías Bravo, María del Carmen Esandi, and Cecilia Bouzat 391
- Concatenated hERG1 Tetramers Reveal Stoichiometry of Altered Channel Gating by RPR-260243
Wei Wu, Alison Gardner, and Michael C. Sanguinetti 401
- Engineering High-Potency R-spondin Adult Stem Cell Growth Factors
Margaret L. Warner, Tufica Bell, and Augen A. Pioszak 410
- A Mutation in the Intracellular Loop III/IV of Mosquito Sodium Channel Synergizes the Effect of Mutations in Helix IIS6 on Pyrethroid Resistance
Lingxin Wang, Yoshiko Nomura, Yuzhe Du, Nannan Liu, Boris S. Zhorov, and Ke Dong 421
- Induction of CYP26A1 by Metabolites of Retinoic Acid: Evidence That CYP26A1 Is an Important Enzyme in the Elimination of Active Retinoids
Ariel R. Topletz, Sasmita Tripathy, Robert S. Foti, Jakob A. Shimshoni, Wendel L. Nelson, and Nina Isoherranen 430
- A Novel Function for UDP Glycosyltransferase 8: Galactosidation of Bile Acids
Robyn Meech, Nurul Mubarakah, Aravind Shivasami, Anne Rogers, Pramod C. Nair, Dong Gui Hu, Ross A. McKinnon, and Peter I. Mackenzie 442
- Potent Trypanocidal Curcumin Analogs Bearing a Monoenone Linker Motif Act on *Trypanosoma brucei* by Forming an Adduct with Trypanothione
Abdulsalam A.M. Alkhalidi, Darren J. Creek, Hasan Ibrahim, Dong-Hyun Kim, Neils B. Quashie, Karl E. Burgess, Chatchawan Changtam, Michael P. Barrett, Apichart Suksamrarn, and Harry P. de Koning 451
- The c-MET/PI3K Signaling Is Associated with Cancer Resistance to Doxorubicin and Photodynamic Therapy by Elevating BCRP/ABCG2 Expression
Kyeong-Ah Jung, Bo-hyun Choi, and Mi-Kyoung Kwak 465
- Expansion of First-in-Class Drug Candidates That Sequester Toxic All-Trans-Retinal and Prevent Light-Induced Retinal Degeneration
Jianye Zhang, Zhiqian Dong, Sreenivasa Reddy Mundla, X. Eric Hu, William Seibel, Ruben Papoian, Krzysztof Palczewski, and Marcin Golczak 477

Interleukin-6 Attenuates Serotonin 2A Receptor Signaling by Activating the JAK-STAT Pathway <i>Jennifer J. Donegan, Michael S. Patton, Teresa S. Chavera, Kelly A. Berg, David A. Morilak, and Milena Girotti</i>	492
Repurposing the Antipsychotic Trifluoperazine as an Antimetastasis Agent <i>Ashleigh Pulkoski-Gross, Jian Li, Carolina Zheng, Yiyi Li, Nengtai Ouyang, Basil Rigas, Stanley Zucker, and Jian Cao</i>	501
▣ Translational Downregulation of HSP90 Expression by Iron Chelators in Neuroblastoma Cells <i>Viktoryia Sidarovich, Valentina Adami, Pamela Gatto, Valentina Greco, Toma Tebaldi, Gian Paolo Tonini, and Alessandro Quattrone</i>	513
The Sleep-Modulating Peptide Orexin-B Protects Midbrain Dopamine Neurons from Degeneration, Alone or in Cooperation with Nicotine <i>Serge Guerreiro, Clélia Florence, Erwann Rousseau, Sabah Hamadat, Etienne C. Hirsch, and Patrick P. Michel</i>	525
1,25-Dihydroxyvitamin D ₃ Causes ADAM10-Dependent Ectodomain Shedding of Tumor Necrosis Factor Receptor 1 in Vascular Smooth Muscle Cells <i>Won Seok Yang, Hyun Woo Kim, Joo Mi Lee, Nam Jeong Han, Mee Jeong Lee, and Su-Kil Park</i>	533
Novel Thiosemicarbazones Regulate the Signal Transducer and Activator of Transcription 3 (STAT3) Pathway: Inhibition of Constitutive and Interleukin 6–Induced Activation by Iron Depletion <i>Goldie Y. L. Lui, Zaklina Kovacevic, Sharleen V. Menezes, Danuta S. Kalinowski, Angelica M. Merlot, Sumit Sahni, and Des R. Richardson</i>	543

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

About the cover: Model of the highly conserved UDP-sugar binding site in human UGT8 showing key residues interacting with the UDP-sugar. See the article by Meech et al. ([dx.doi.org/10.1124/mol.114.093823](https://doi.org/10.1124/mol.114.093823)).