

MOLECULAR PHARMACOLOGY

July 2019

Volume 96

Number 1

molpharm.aspetjournals.org

ISSN 1521-0111

MINIREVIEW

Update on Gaseous Signaling Molecules Nitric Oxide and Hydrogen Sulfide: Strategies to Capture their Functional Activity for Human Therapeutics

Nathan S. Bryan and David J. Lefer

109

ARTICLES

Differential Regulation of Human Ether-à-Go-Go-Related Gene (hERG) Current and Expression by Activation of Protein Kinase C

Morgan E. Sutherland-Deveen, Tingzhong Wang, Shawn M. Lamothe, Jared N. Tschirhart, Jun Guo, Wentao Li, Tonghua Yang, Yuan Du, and Shetuan Zhang

1

Identification of MRP4/ABCC4 as a Target for Reducing the Proliferation of Pancreatic Ductal Adenocarcinoma Cells by Modulating the cAMP Efflux

Alejandro Carozzo, Agustín Yaneff, Natalia Gómez, Nicolás Di Siervi, Ana Sahores, Federico Diez, Alejandra I. Attorresi, Ángela Rodríguez-González, Federico Monczor, Natalia Fernández, Martín Abba, Carina Shayo, and Carlos Davio

13

A Small-Molecule Compound Selectively Activates K2P Channel TASK-3 by Acting at Two Distant Clusters of Residues

Fuyun Tian, Yunguang Qiu, Xi Lan, Min Li, Huaiyu Yang, and Zhaobing Gao

26

Identifying the ErbB/MAPK Signaling Cascade as a Therapeutic Target in Canine Bladder Cancer

Kathryn E. Cronise, Belen G. Hernandez, Daniel L. Gustafson, and Dawn L. Duval

36

Hepatic Expression of Niemann-Pick C1-Like 1, a Cholesterol Reabsorber from Bile, Exacerbates Western Diet-Induced Atherosclerosis in LDL Receptor Mutant Mice

Hideaki Yamamoto, Yoshihide Yamanashi, Tappei Takada, Shuang Mu, Yusuke Tanaka, Toko Komine, and Hiroshi Suzuki

47

Impact of Phosphodiesterase 4 Inhibition on the Operational Efficacy, Response Maxima, and Kinetics of Indacaterol-Induced Gene Expression Changes in BEAS-2B Airway Epithelial Cells: A Global Transcriptomic Analysis

Radhika Joshi, Dong Yan, Omar Hamed, Mahmoud M. Mostafa, Taruna Joshi, Robert Newton, and Mark A. Giembycz

56

Colchicine Binding Site Agent DJ95 Overcomes Drug Resistance and Exhibits Antitumor Efficacy

Kinsie E. Arnst, Yuxi Wang, Zi-Ning Lei, Dong-Jin Hwang, Gyanendra Kumar, Dejian Ma, Deanna N. Parke, Qiang Chen, Jinliang Yang, Stephen W. White, Tiffany N. Seagroves, Zhe-Sheng Chen, Duane D. Miller, and Wei Li

73

Small Fluorescein Arsenical Hairpin-Based Förster Resonance Energy Transfer Analysis Reveals Changes in Amino- to Carboxyl-Terminal Interactions upon OAG Activation of Classical Transient Receptor Potential 6

Susanne Fiedler, Ursula Storch, Serap Erdogmus, Thomas Gudermann, Michael Mederos y Schnitzler, and Alexander Dietrich

90

- ❑ Active-Site Tryptophan, the Target of Antineoplastic C-Terminal Binding Protein Inhibitors, Mediates Inhibitor Disruption of CtBP Oligomerization and Transcription Coregulatory Activities
M. Michael Dcona, Priyadarshan K. Damle, Francisco Zarate-Perez, Benjamin L. Morris, Zaid Nawaz, Michael J. Dennis, Xiaoyan Deng, Sudha Korwar, Sahib J. Singh, Keith C. Ellis, William E. Royer, Dipankar Bandyopadhyay, Carlos Escalante, and Steven R. Grossman

99

- ❑ Preferred Formation of Heteromeric Channels between Coexpressed SK1 and IKCa Channel Subunits Provides a Unique Pharmacological Profile of Ca²⁺-Activated Potassium Channels
James Higham, Giriraj Sahu, Rima-Marie Wazen, Pina Colarusso, Alice Gregorie, Bartholomew S. J. Harvey, Lucy Goudswaard, Gemma Varley, David N. Sheppard, Ray W. Turner, and Neil V. Marrion

115

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

About the cover: DJ95 interferes with microtubule networks and mitotic spindle organization. See article by Arnst et al. ([dx.doi.org/10.1124/mol.118.114801](https://doi.org/10.1124/mol.118.114801)).