

# MOLECULAR PHARMACOLOGY

March 2016

Volume 89

Number 3

[molpharm.aspetjournals.org](http://molpharm.aspetjournals.org)

ISSN 1521-0111

## MINIREVIEW

The Pharmacology and Function of Receptors for Short-Chain Fatty Acids

*Daniele Bolognini, Andrew B. Tobin, Graeme Milligan, and Catherine E. Moss*

388

## ARTICLES

Kv7.5 Potassium Channel Subunits Are the Primary Targets for PKA-Dependent Enhancement of Vascular Smooth Muscle Kv7 Currents

*Bharath K. Mani, Christina Robakowski, Lyubov I. Brueggemann, Leanne L. Cribbs, Abhishek Tripathi, Matthias Majetschak, and Kenneth L. Byron*

323

□ A Hydrogen-Bonded Polar Network in the Core of the Glucagon-Like Peptide-1 Receptor Is a Fulcrum for Biased Agonism: Lessons from Class B Crystal Structures

*Denise Wootten, Christopher A. Reynolds, Cassandra Koole, Kevin J. Smith, Juan C. Mobarec, John Simms, Tezz Quon, Thomas Coudrat, Sebastian G. B. Furness, Laurence J. Miller, Arthur Christopoulos, and Patrick M. Sexton*

335

□ Screening of Transient Receptor Potential Canonical Channel Activators Identifies Novel Neurotrophic Piperazine Compounds

*Seishiro Sawamura, Masahiko Hatano, Yoshinori Takada, Kyosuke Hino, Tetsuya Kawamura, Jun Tanikawa, Hiroshi Nakagawa, Hideharu Hase, Akito Nakao, Mitsuru Hirano, Rachapun Rotrattanadumrong, Shigeki Kiyonaka, Masayuki X. Mori, Motohiro Nishida, Yaopeng Hu, Ryuji Inoue, Ryu Nagata, and Yasuo Mori*

348

□ Biased Type 1 Cannabinoid Receptor Signaling Influences Neuronal Viability in a Cell Culture Model of Huntington Disease

*Robert B. Laprairie, Amina M. Bagher, Melanie E. M. Kelly, and Eileen M. Denovan-Wright*

364

□ Verbascoside Alleviates Pneumococcal Pneumonia by Reducing Pneumolysin Oligomers

*Xiaoran Zhao, Hongen Li, Jianfeng Wang, Yan Guo, Bowen Liu, Xuming Deng, and Xiaodi Niu*

376

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

*About the cover:* A new homology model of the human GLP-1 receptor showing key residues involved in peptide-mediated signaling bias (red) and global receptor-dependent signal bias (blue); view from the extracellular side. See the article by Wootten et al. ([dx.doi.org/10.1124/mol.115.101246](https://doi.org/10.1124/mol.115.101246)).