

The Journal of PHARMACOLOGY

And Experimental Therapeutics

A Publication of the American Society for Pharmacology and Experimental Therapeutics

February 2018

Vol. 364, No. 2

Contents

MINIREVIEWS

- Genetic and Molecular Regulation of Extrasynaptic GABA-A Receptors in the Brain: Therapeutic Insights for Epilepsy 180
Shu-Hui Chuang and Doodipala Samba Reddy
- ▣ Etiopathogenesis and Pharmacological Prevention of a Type-2 Diabetes Model in Male Mice 347
Alberto Loizzo, Santi M. Spampinato, Gabriele Campana, and Stefano Loizzo

BEHAVIORAL PHARMACOLOGY

- Chronic Δ^9 -THC in Rhesus Monkeys: Effects on Cognitive Performance and Dopamine D2/D3 Receptor Availability 300
William S. John, Thomas J. Martin, Kiran Kumar Solingapuram Sai, Susan H. Nader, H. Donald Gage, Akiva Mintz, and Michael A. Nader
- Inhibition of Cocaine and 3,4-Methylenedioxypyrovalerone (MDPV) Self-Administration by Lorcaserin Is Mediated by 5-HT_{2C} Receptors in Rats 359
Brenda M. Gannon, Agnieszka Sulima, Kenner C. Rice, and Gregory T. Collins

CARDIOVASCULAR

- ▣ Nonclinical Cardiovascular Studies of Prucalopride, a Highly Selective 5-Hydroxytryptamine 4 Receptor Agonist 156
Kelly Conlon, Joris H. De Maeyer, Chris Bruce, Jan A. J. Schuurkes, Lee Christie, James McRedmond, Katayoun Derakhchan, and Paul R. Wade
- Impaired Pulmonary Arterial Vasoconstriction and Nitric Oxide-Mediated Relaxation Underlie Severe Pulmonary Hypertension in the Sugen-Hypoxia Rat Model 258
Helen Christou, Hannes Hudalla, Zoe Michael, Evgenia J. Filatava, Jun Li, Minglin Zhu, Jose S. Possomato-Vieira, Carlos Dias-Junior, Stella Kourembanas, and Raouf A. Khalil

CELLULAR AND MOLECULAR

- ▣ A Potent Antagonist of Protease-Activated Receptor 2 That Inhibits Multiple Signaling Functions in Human Cancer Cells 246
Yuhong Jiang, Mei-Kwan Yau, Junxian Lim, Kai-Chen Wu, Weijun Xu, Jacky Y. Suen, and David P. Fairlie

DRUG DISCOVERY AND TRANSLATIONAL MEDICINE

- ▣ A Combination of G Protein-Coupled Receptor Modulators Protects Photoreceptors from Degeneration 207
Tivadar Orban, Henri Leinonen, Tamar Getter, Zhiqian Dong, Wenyu Sun, Songqi Gao, Alexander Veenstra, Hossein Heidari-Torkabadi, Timothy S. Kern, Philip D. Kiser, and Krzysztof Palczewski
- Dimethoxy-etomidate: A Nonhypnotic Etomidate Analog that Potently Inhibits Steroidogenesis 229
Megan McGrath, Celena Ma, and Douglas E. Raines
- Tegoprazan, a Novel Potassium-Competitive Acid Blocker to Control Gastric Acid Secretion and Motility 275
Nobuyuki Takahashi and Yukinori Take
- Inhibition of Myeloperoxidase by *N*-Acetyl Lysyltyrosylcysteine Amide Reduces Oxidative Stress-Mediated Inflammation, Neuronal Damage, and Neural Stem Cell Injury in a Murine Model of Stroke 311
Guoliang Yu, Ye Liang, Shikan Zheng, and Hao Zhang
- ▣ Cancer Stem Cell-Suppressing Activity of Chrysotoxine, a Bibenzyl from *Dendrobium pulchellum* 332
Narumol Bhummaphan, Varisa Pongrakhananon, Boonchoo Sritularak, and Pithi Chanvorachote

ENDOCRINE AND DIABETES

Restoration of Rostral Ventrolateral Medulla Cystathionine- γ Lyase Activity Underlies Moxonidine-Evoked Neuroprotection and Sympathoinhibition in Diabetic Rats 170

Mohamed A. Fouda, Shaimaa S. El-Sayed, and Abdel A. Abdel-Rahman

GASTROINTESTINAL, HEPATIC, PULMONARY, AND RENAL

☐ Selective Cannabinoid 2 Receptor Stimulation Reduces Tubular Epithelial Cell Damage after Renal Ischemia-Reperfusion Injury 287

Jeffrey D. Pressly, Suni M. Mustafa, Ammaar H. Adibi, Sahar Alghamdi, Pankaj Pandey, Kuldeep K. Roy, Robert J. Doerksen, Bob M. Moore, Jr., and Frank Park

INFLAMMATION, IMMUNOPHARMACOLOGY, AND ASTHMA

Adenosine A_{2A} Receptor Agonist, 2-*p*-(2-Carboxyethyl)phenethylamino-5'-*N*-ethylcarboxamidoadenosine Hydrochloride Hydrate, Inhibits Inflammation and Increases Fibroblast Growth Factor-2 Tissue Expression in Carrageenan-Induced Rat Paw Edema 221

Armando Ialenti, Elisabetta Caiazzo, Silvana Morello, Rosa Carnuccio, and Carla Cicala

METABOLISM, TRANSPORT, AND PHARMACOGENOMICS

☐ Longitudinal Influence of Pregnancy on Nicotine Metabolic Pathways 238

Taraneh Taghavi, Christopher A. Arger, Sarah H. Heil, Stephen T. Higgins, and Rachel F. Tyndale

Low-Dose Anthracycline and Risk of Heart Failure in a Pharmacokinetic Model of Human Myocardium Exposure: Analog Specificity and Role of Secondary Alcohol Metabolites 323

Emanuela Salvatorelli, Pierantonio Menna, Massimo Chello, Elvio Covino, and Giorgio Minotti

NEUROPHARMACOLOGY

Safinamide Differentially Modulates In Vivo Glutamate and GABA Release in the Rat Hippocampus and Basal Ganglia 198

Michele Morari, Alberto Brugnoli, Clarissa Anna Pisanò, Salvatore Novello, Carla Caccia, Elsa Melloni, Gloria Padoani, Silvia Vailati, and Marco Sardina

ERRATUM

Correction to “Discovery of Novel Small-Molecule Inducers of Heme Oxygenase-1 That Protect Human iPSC-Derived Cardiomyocytes from Oxidative Stress” 179

☐ Supplemental material is available at jpet.aspetjournals.org.

About the cover: Trafficking of Zn²⁺ at the gluzineric synapse. See the article by Chuang and Reddy ([dx.doi.org/10.1124/jpet.117.244673](https://doi.org/10.1124/jpet.117.244673)).