MINIREVIEW
Topology of Class A G Protein-Coupled Receptors: Insights Gained from Crystal Structures of Rhodopsins, Adrenergic and Adenosine Receptors
Debarshi Mustafi and Krzysztof Palczewski

PERPECTIVE
Functional Selectivity of GPCR Ligand Stereoisomers: New Pharmacological Opportunities
Roland Seifert and Stefan Dove

ARTICLES
An Intracellular Loop 2 Amino Acid Residue Determines Differential Binding of Arrestin to the Dopamine D_2 and D_3 Receptors
Hongxiang Lan, Martha M. Teeter, Vsevolod V. Gurevich, and Kim A. Neve

Hydrogen Sulfide Inhibits Rotenone-Induced Apoptosis via Preservation of Mitochondrial Function
Li-Fang Hu, Ming Lu, Zhi-Yuan Wu, Peter T.-H. Wong, and Jin-Song Bian

Suppression of 1-Methyl-4-phenyl-1,2,3,6-tetrahydropyridine-Induced Nitric-Oxide Synthase 2 Expression in Astrocytes by a Novel Diindolylmethane Analog Protects Striatal Neurons against Apoptosis
David L. Carbone, Katriana A. Popichak, Julie A. Moreno, Stephen Safe, and Ronald B. Tjalkens

Overlapping Binding Site for the Endogenous Agonist, Small-Molecule Agonists, and Ago-allosteric Modulators on the Ghrelin Receptor
Birgitte Holst, Thomas M. Frimurer, Jacek Mokrosinski, Tine Halkjaer, Karina B. Cullberg, Christina R. Underwood, and Thue W. Schwartz

Structural Basis of NR2B-Selective Antagonist Recognition by N-Methyl-d-aspartate Receptors
Laetitia Mony, Lucie Krzaczkowski, Manuel Leonetti, Anne Le Goff, Karine Alarcon, Jacques Neyton, Hughes-Olivier Bertrand, Francine Acher, and Pierre Paoletti

The symbols in the table of contents identify articles discussed in the Perspective.
YC-1 Stimulates the Expression of Gaseous Monoxide-Generating Enzymes in Vascular Smooth Muscle Cells
Xiao-ming Liu, Kelly J. Peyton, Natalia N. Mendelev, Hong Wang, David A. Tulis, and William Durante

Intracellular Activation and Deactivation of Tasidotin, an Analog of Dolastatin 15: Correlation with Cytotoxicity
Ruoli Bai, Michael C. Edler, Peter L. Bonate, Terry D. Copeland, George R. Pettit, Richard F. Ludueña, and Ernest Hamel

Opposing Effects of Platelet-Activating Factor and Lyso-Platelet-Activating Factor on Neutrophil and Platelet Activation
Emily J. Welch, Ram P. Naikawadi, Zhenyu Li, Phoebe Lin, Satoshi Ishii, Takao Shimizu, Chinnaswamy Tiruppathi, Xiaoping Du, Papasani V. Subbaiah, and Richard D. Ye

The G₁ and G₁₂ Families of Heterotrimeric G Proteins Report Functional Selectivity
Li Zhang, Lawrence F. Brass, and David R. Manning

Inhibition of Arachidonic Acid and Iron-Induced Mitochondrial Dysfunction and Apoptosis by Oltipraz and Novel 1,2-Dithiole-3-thione Congeners
Sang Mi Shin and Sang Geon Kim

ERRATA
Correction to “The NR1 M3 Domain Mediates Allosteric Coupling in the N-Methyl-d-aspartate Receptor” 254
Correction to “Inhibitors of GlyT1 Affect Glycine Transport via Discrete Binding Sites” 258
Correction to Table of Contents (Volume 74, Number 6, December 2008) 258

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

About the cover: Structural comparison between opsin and rhodopsin illustrating a pathway for retinal exchange. See the article by Mustafi et al. on page 1 of this issue.