MOLECULAR

Volume 76

Number 1

July 2009

PHARMACOLOGY

ISSN 0026-895X

http://molpharm.aspetjournals.org

MINIREVIEWS Diverse Actions and Target-Site Selectivity of Neonicotinoids: Structural Insights Kazuhiko Matsuda, Satoshi Kanaoka, Miki Akamatsu, and David B. Sattelle 1 Inactivation and Biotransformation of the Endogenous Cannabinoids Anandamide and 2-Arachidonoylglycerol Marla L. Yates and Eric L. Barker 11 ACCELERATED COMMUNICATION Increased GABA_B Receptor-Mediated Signaling Reduces the Susceptibility of Fragile X Knockout Mice to Audiogenic Seizures Laura K. K. Pacey, Scott P. Heximer, and David R. Hampson 18 ARTICLES Contribution of Binding Enthalpy and Entropy to Affinity of Antagonist and Agonist Binding at Human and Guinea Pig Histamine H₁-Receptor Hans-Joachim Wittmann, Roland Seifert, and Andrea Strasser 25 Regulation of Renal Outer Medullary Potassium Channel and Renal K⁺ Excretion by Klotho Seung-Kuy Cha, Ming-Chang Hu, Hiroshi Kurosu, Makoto Kuro-o, Orson Moe, and Chou-Long Huang 38 Thiazolidinediones Mimic Glucose Starvation in Facilitating Sp1 Degradation through the Up-Regulation of β -Transducin Repeat-Containing Protein Shuo Wei, Hsiao-Ching Chuang, Wan-Chi Tsai, Hsiao-Ching Yang, Shiuh-Rong Ho, Andrew J. Paterson, Samuel K. Kulp, and Ching-Shih Chen 47 In Vivo and in Vitro Structure-Activity Relationships and Structural Conformation of Kisspeptin-10-Related Peptides Ester Gutiérrez-Pascual, Jérôme Leprince, Antonio J. Martínez-Fuentes, Isabelle Ségalas-Milazzo, Rafael Pineda, Juan Roa, Mario Duran-Prado, Laure Guilhaudis, Elia Desperrois, Aurélie Lebreton, Leonor Pinilla, Marie-Christine Tonon, María M. Malagón, Hubert Vaudry, Manuel Tena-Sempere, and Justo P. Castaño 58

Molecular Pharmacology (ISSN 0026-895X) is published monthly (two volumes per year beginning in January and July) by the American Society for Pharmacology and Experimental Therapeutics, 9650 Rockville Pike, Bethesda, MD 20814-3995; e-mail: subscriptions@ aspet.org; web site: aspet.org. Periodicals postage paid at Bethesda, MD, and at additional mailing offices. POSTMASTER: Send address changes to Molecular Pharmacology, 9650 Rockville Pike, Bethesda, MD 20814-3995. Subscription rates: U.S.: \$686.00; outside the U.S.: \$778.00. Single copy: \$60.00. GST Tax Number for Canadian sub-

scribers: BN:13489 2330 RT. Indexed or abstracted by Biochemistry & Biophysics Citation Index®, Biological Abstracts, Current Awareness in Biological Sciences, Current Contents®/Life Sciences, EMBASE/Excerpta Medica, Index Medicus, Medical Documentation Service®, Reference Update®, Research Alert®, Science Citation Index®, and SciSearch®. Copyright © 2009 by the American Society for Pharmacology and Experimental Therapeutics. All rights reserved. Printed in the U.S.A.

	Site Specificity of Agonist and Second Messenger-Activated Kinases for Somatostatin Receptor Subtype 2A (Sst2A) Phosphorylation <i>Qisheng Liu, Mark S. Bee, and Agnes Schonbrunn</i>	68
	Polyethylene Glycosylated Curcumin Conjugate Inhibits Pancreatic Cancer Cell Growth through Inactivation of Jab1 Jun Li, Yun Wang, Chaozhe Yang, Pengfei Wang, Denise K. Oelschlager, Yong Zheng, De-An Tian,	
	William E. Grizzle, Donald J. Buchsbaum, and Mei Wan	81
S	Apratoxin A Reversibly Inhibits the Secretory Pathway by Preventing Cotranslational Translocation Yanxia Liu, Brian K. Law, and Hendrik Luesch	91
	Inhibition of Aquaporin-1 and Aquaporin-4 Water Permeability by a Derivative of the Loop Diuretic Bumetanide Acting at an Internal Pore-Occluding Binding Site Elton Migliati, Nathalie Meurice, Pascale DuBois, Jennifer S. Fang, Suma Somasekharan, Elizabeth Beckett, Gary Flynn, and Andrea J. Yool	105
S	The Spermostatic and Microbicidal Actions of Quinones and Maleimides: Toward a Dual-Purpose Contraceptive Agent	
	Louise M. Hughes, Renate Griffith, Alison Carey, Trent Butler, Scott W. Donne, Ken W. Beagley, and R. John Aitken	113
	S3b Amino Acid Substitutions and Ancillary Subunits Alter the Affinity of <i>Heteropoda venatoria</i> Toxin 2 for Kv4.3	
	Christopher V. DeSimone, YiChun Lu, Vladimir E. Bondarenko, and Michael J. Morales	125
S	δ Receptors Are Required for Full Inhibitory Coupling of μ Receptors to Voltage-Dependent Ca ²⁺ Channels in Dorsal Root Ganglion Neurons Wendy Walwyn, Scott John, Matthew Maga, Christopher J. Evans, and Tim G. Hales	134
	α_1 -Adrenergic Receptor Stimulates Interleukin-6 Expression and Secretion through Both mRNA Stability and Transcriptional Regulation: Involvement of p38 Mitogen-Activated Protein Kinase and Nuclear Factor- κ B Dianne M. Perez, Robert S. Papay, and Ting Shi	144
	KLYP956 Is a Non–Imidazole-Based Orally Active Inhibitor of Nitric-Oxide Synthase Dimerization Kent T. Symons, Mark E. Massari, Phan M. Nguyen, Tom T. Lee, Jeffrey Roppe, Céline Bonnefous, Joseph E. Payne, Nicholas D. Smith, Stewart A. Noble, Marciano Sablad, Natasha Rozenkrants, Yan Zhang, Tadimeti S. Rao, Andrew K. Shiau, and Christian A. Hassig	153
	Potent Activity of Indolequinones against Human Pancreatic Cancer: Identification of Thioredoxin Reductase as a Potential Target Chao Yan, Biehuoy Shieh, Philip Reigan, Zhiyong Zhang, Marie A. Colucci, Aurélie Chilloux, Jeffery J. Newsome, David Siegel, Dan Chan, Christopher J. Moody, and David Ross	163
	Heme-Oxygenase-1 Induction and Carbon Monoxide-Releasing Molecule Inhibit Lipopolysaccharide (LPS)-Induced High-Mobility Group Box 1 Release in Vitro and Improve Survival of Mice in LPS-and Cecal Ligation and Puncture-Induced Sepsis Model in Vivo Konstantin Tsoyi, Tae Yu Lee, Young Soo Lee, Hye Jung Kim, Han Geuk Seo, Jae Heun Lee, and Ki Churl Chang	173
	Mesalamine Suppresses the Expression of TC22, a Novel Tropomyosin Isoform Associated with Colonic Neoplasia Koushik K. Das, Manisha Bajpai, Yingxin Kong, Jianying Liu, Xin Geng, and Kiron M. Das	183
	S-Adenosylmethionine and Methylthioadenosine Inhibit Cellular FLICE Inhibitory Protein Expression and Induce Apoptosis in Colon Cancer Cells	
	Tony W. H. Li, Qingsong Zhang, Pilsoo Oh, Meng Xia, Hui Chen, Sean Bemanian, Natalie Lastra, Magda Circ, Mary Pat Moyer, José M. Mato, Tak Yee Aw, and Shelly C. Lu	192

Activation Switch in the Transmembrane Domain of Metabotropic Glutamate Receptor
 Masataka Yanagawa, Takahiro Yamashita, and Yoshinori Shichida

 Cisplatin-Induced DNA Damage Activates Replication Checkpoint Signaling Components that

S Cisplatin-Induced DNA Damage Activates Replication Checkpoint Signaling Components that Differentially Affect Tumor Cell Survival Jill M. Wagner and Larry M. Karnitz

208

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