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### **Biochemical Pharmacology**





## Biochemical Pharmacology, Volume 78, issue 3, 1 August 2009 Contents

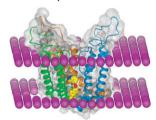
#### **COMMENTARY**

#### **Analgesic potential of TRPV1 antagonists**

p 211-216

Philip R. Kym, Michael E. Kort, Charles W. Hutchins

A pharmacophore model highlighting common structural features of TRPV1 antagonists is presented. ABT-102 is depicted in the putative common binding site described in the text. A review of clinical candidates ABT-102, AMG-517, and SB-705498 is provided.



The chemist as astronaut: Searching for biologically useful space in the chemical universe

p 217-223

David J. Triggle



#### **ANTIBIOTICS AND CHEMOTHERAPEUTICS**

Distinct interactions of 2'- and 3'-0-(N-methyl)anthraniloyl-isomers of ATP and GTP  $\,$  p 224–230 with the adenylyl cyclase toxin of *Bacillus anthracis*, edema factor

Srividya Suryanarayana, Jenna L. Wang, Mark Richter, Yuequan Shen, Wei-Jen Tang, Gerald H. Lushington, Roland Seifert

By using enzymatic, fluorescence spectroscopy and molecular modelling approaches, this paper shows distinct interaction defined isomers of MANT-ATP and MANT-GTP with edema factor from *Bacillus anthracis*.

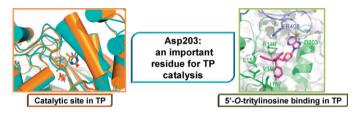


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#### Identification of aspartic acid-203 in human thymidine phosphorylase as an important residue for both catalysis and non-competitive inhibition by the small molecule "crystallization chaperone" 5'-0-tritylinosine (KIN59)

A. Bronckaers, L. Aguado, A. Negri, M.-J. Camarasa, J. Balzarini, M.-J. Pérez-Pérez, F. Gago, S. Liekens

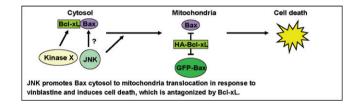
The search for the binding site of the allosteric inhibitor 5'-O-trylinosine has allowed the identification of Asp203 as an important residue for catalysis in human thymidine phosphorylase.



#### Regulation of Bax by c-Jun NH<sub>2</sub>-terminal kinase and Bcl-xL in vinblastine-induced apoptosis

p 241-248

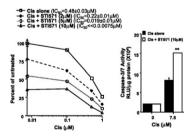
Rong Chu, Meenakshi Upreti, Wen-Xing Ding, Xiao-Ming Yin, Timothy C. Chambers



#### STI571 sensitizes breast cancer cells to 5-fluorouracil, cisplatin and camptothecin in a cell type-specific manner

p 249-260

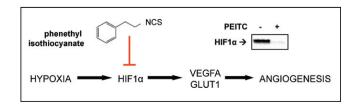
Jonathan T. Sims, Sourik Ganguly, Leann S. Fiore, Chris J. Holler, Eun-Sil Park, Rina Plattner STI571 synergizes with cisplatin to inhibit proliferation (left) and induce apoptosis (right) of BT-549 breast cancer cells.



#### Inhibition of hypoxia inducible factor by phenethyl isothiocyanate

p 261-272

Xiu-Hong Wang, Breeze E. Cavell, Sharifah S. Syed Alwi, Graham Packham



p 231-240

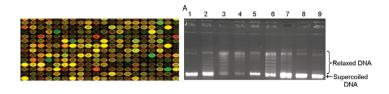
Contents e3

## Gene expression profiling identifies novel key players involved in the cytotoxic effect of Artesunate on pancreatic cancer cells

p 273-283

Mahmoud Youns, Thomas Efferth, Jürgen Reichling, Kurt Fellenberg, Andrea Bauer, Jörg D. Hoheisel

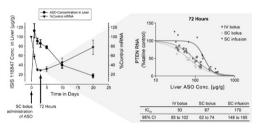
Gene expression profiling identified Artesunate as a novel topoisomerase  $II\alpha$  inhibitor that inhibits pancreatic cancer cell growth through modulation of multiple signalling pathways.



#### PHARMACOKINETICS AND DRUG METABOLISM

# Effect of dose and plasma concentration on liver uptake and pharmacologic activity of a 2'-methoxyethyl modified chimeric antisense oligonucleotide targeting PTEN

Richard S. Geary, Ed Wancewicz, John Matson, Megan Pearce, Andrew Siwkowski, Eric Swayze, Frank Bennett Rate and route of administration, and ultimate plasma concentration, alter the effective uptake of antisense oligonucleotide in mouse liver.

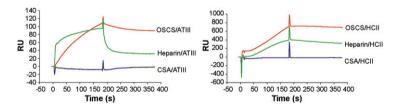


#### **TOXICOLOGY**

## Oversulfated chondroitin sulfate interaction with heparin-binding proteins: New insights into adverse reactions from contaminated heparins

p 292-300

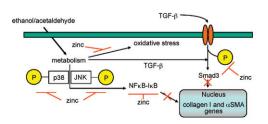
Boyangzi Li, Jiraporn Suwan, Jeffrey G. Martin, Fuming Zhang, Zhenqing Zhang, Debra Hoppensteadt, Melanie Clark, Jawed Fareed, Robert J. Linhardt



# Zinc supplementation attenuates ethanol- and acetaldehyde-induced liver stellate cell activation by inhibiting reactive oxygen species (ROS) production and by influencing intracellular signaling

p 301-314

Agnieszka Szuster-Ciesielska, Krzysztof Plewka, Jadwiga Daniluk, Martyna Kandefer-Szerszeń



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INDEXED/ABSTRACTED IN: Curr. Cont. ASCA, Biosis Data, CAB Inter., Chemical Abstracts Service, Curr. Cont./Life Sci., CABS, EMBASE/Excerp. Med., Curr. Cont. ISI/BIOMED Database, MEDLINE, PASCAL-CNRS Data, Curr. Cont. Sci. Cit. Ind., Curr. Cont. SCISEARCH Data, Ind. Med., Reference Update. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®.



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