



Biochemical Pharmacology, Volume 79, issue 2, 15 January 2010

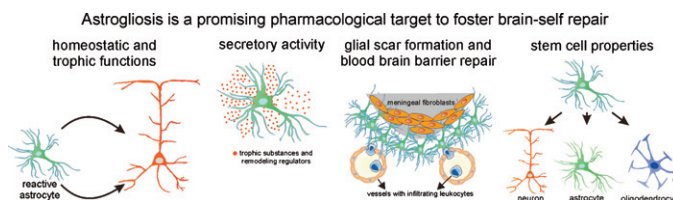
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Annalisa Buffo, Chiara Rolando, Stefania Ceruti

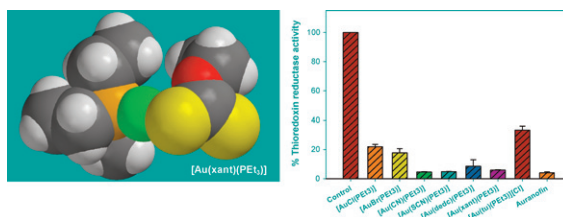


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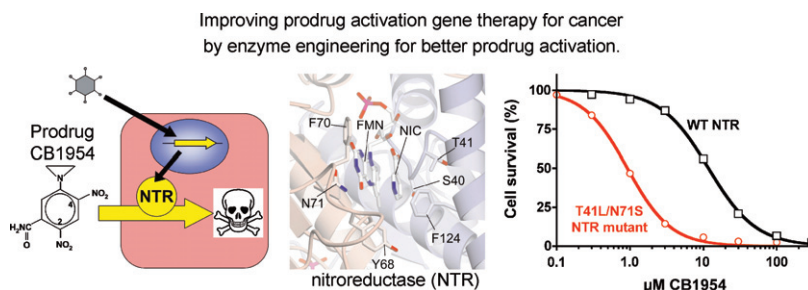


Testing double mutants of the enzyme nitroreductase for enhanced cell sensitisation to prodrugs: Effects of combining beneficial single mutations

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Mansoor Jaberipour, Simon O. Vass, Christopher P. Guise, Jane I. Grove, Richard J. Knox, Longqin Hu, Eva I. Hyde, Peter F. Searle

Improving prodrug activation gene therapy for cancer by enzyme engineering for better prodrug activation.

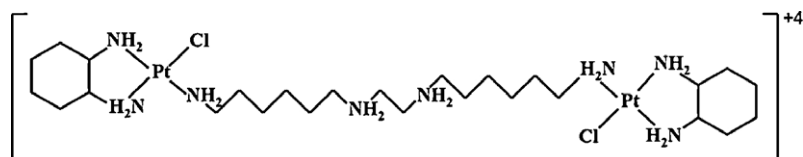


Conformation and recognition of DNA modified by a new antitumor dinuclear Pt^{II} complex resistant to decomposition by sulfur nucleophiles

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Lenka Zerzankova, Tereza Suchankova, Oldrich Vrana, Nicholas P. Farrell, Viktor Brabec, Jana Kasparkova

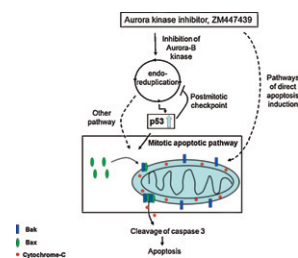
A detailed study of the molecular mechanism of action of a new dinuclear platinum complex is reported. DNA adducts of this complex can largely escape repair and yet inhibit very effectively transcription.



Aurora kinase inhibitor ZM447439 induces apoptosis via mitochondrial pathways

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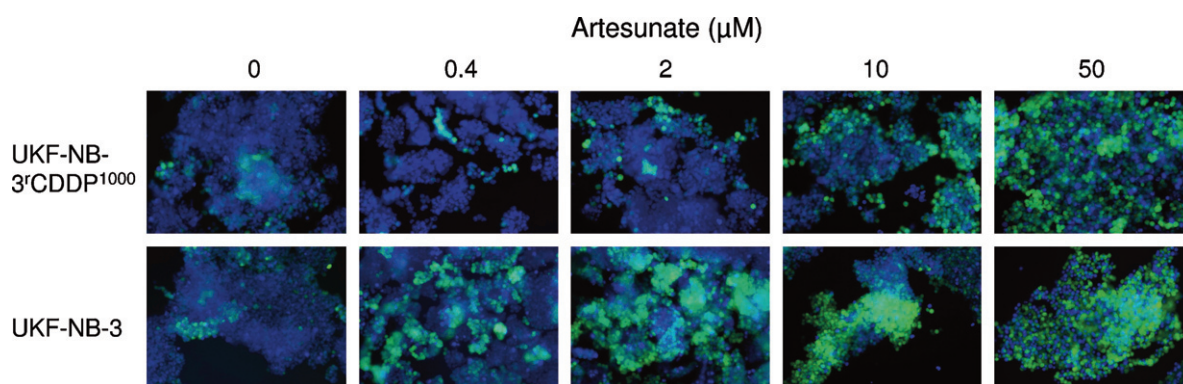
Minglun Li, Anke Jung, Ute Ganswindt, Patrizia Marini, Anna Friedl, Peter T. Daniel, Kirsten Lauber, Verena Jendrosseck, Claus Belka



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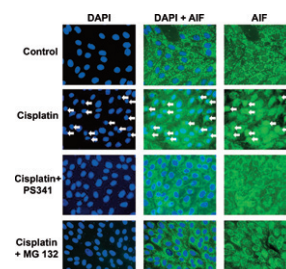


Proteasome inhibitors prevent cisplatin-induced mitochondrial release of apoptosis-inducing factor and markedly ameliorate cisplatin nephrotoxicity

137–146

Ling Liu, Cheng Yang, Christian Herzog, Rohit Seth, Gur P. Kaushal

Proteasome inhibitors PS-341 and MG-132 are capable of blocking mitochondrial translocation of cisplatin-induced apoptosis-inducing factor (AIF) in renal tubular epithelial cells. Green fluorescence is for AIF and blue staining is for DAPI.

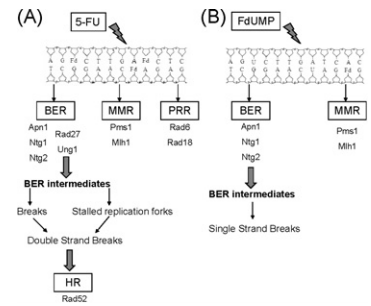


DNA repair pathways involved in repair of lesions induced by 5-fluorouracil and its active metabolite FdUMP

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Renata Matuo, Fabrício Garmus Sousa, Alexandre E. Escargueil, Daniele G. Soares, Ivana Grivicich, Jenifer Saffi, Annette K. Larsen, João Antonio Pêgas Henriques

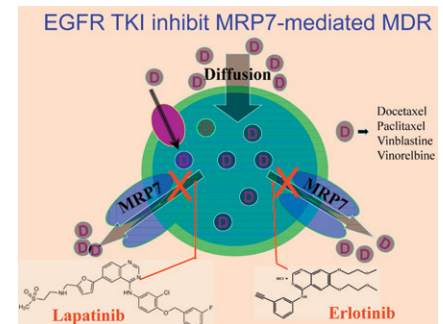
A systematic study in *Saccharomyces cerevisiae* reveals important differences in the repair of DNA lesions induced by 5-fluorouracil and its major metabolite, FdUMP.



Lapatinib and erlotinib are potent reversal agents for MRP7 (ABCC10)-mediated multidrug resistance

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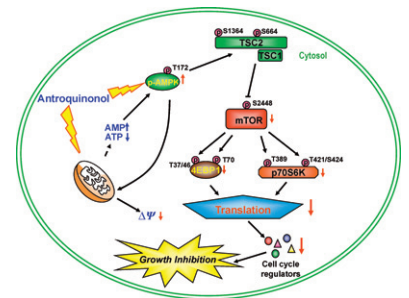
Ye-Hong Kuang, Tong Shen, Xiang Chen, Kamlesh Sodani, Elizabeth Hopper-Borge, Amit K. Tiwari, Jeferson W.K.K. Lee, Li-Wu Fu, Zhe-Sheng Chen



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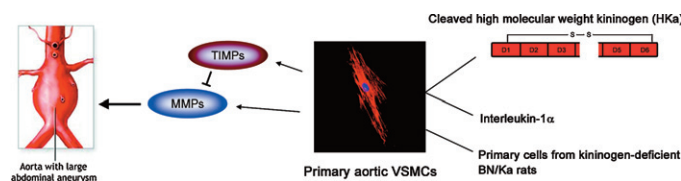
CARDIOVASCULAR PHARMACOLOGY

Cleaved high molecular weight kininogen, a novel factor in the regulation of matrix metalloproteinases in vascular smooth muscle cells

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Uwe Vosgerau, Diljara Lauer, Thomas Unger, Elena Kaschina

Center for Cardiovascular Research (CCR)/Institute of Pharmacology, Charité-Universitätsmedizin Berlin, Hessische Strasse 3-4, 10115 Berlin, Germany

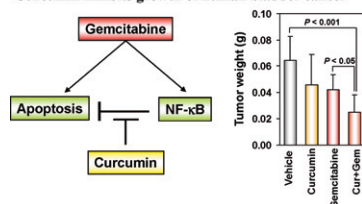


Curcumin potentiates the antitumor effects of gemcitabine in an orthotopic model of human bladder cancer through suppression of proliferative and angiogenic biomarkers 218–228

Sheeja T. Tharakan, Teruo Inamoto, Bokyung Sung, Bharat B. Aggarwal, Ashish M. Kamat

Curcumin, a component of turmeric exhibits significant antitumor effects against human bladder cancer and further potentiates the effects of gemcitabine through the modulation of inflammatory transcription factor NF- κ B, and gene products linked to survival, proliferation and metastasis of the cancer.

Curcumin inhibits growth of human bladder cancer

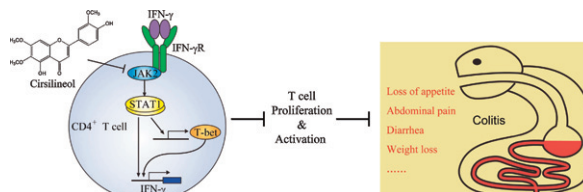


Novel immunomodulatory properties of cirsilineol through selective inhibition of IFN- γ signaling in a murine model of inflammatory bowel disease 229–238

Yang Sun, Xing-Xin Wu, Ye Yin, Fang-Yuan Gong, Yan Shen, Tian-Tian Cai, Xiao-Bin Zhou, Xue-Feng Wu, Qiang Xu

State Key Laboratory of Pharmaceutical Biotechnology, School of Life Sciences, Nanjing University, 22 Han Kou Road, Nanjing 210093, China

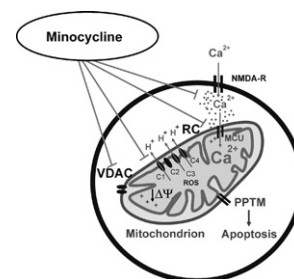
Cirsilineol, a natural flavone compound, attenuates TNBS-induced experimental colitis through selective inhibiting IFN- γ /STAT1/T-bet signaling in intestinal CD4⁺ T cells.



NEUROPHARMACOLOGY

Mitochondria and calcium flux as targets of neuroprotection caused by minocycline in cerebellar granule cells 239–250

Eva Maria Garcia-Martinez, Sara Sanz-Blasco, Andonis Karachitos, Manuel J. Bandez, Francisco J. Fernandez-Gomez, Sergio Perez-Alvarez, Raquel Maria Melero Fernandez de Mera, Maria J. Jordan, Norberto Aguirre, Maria F. Galindo, Carlos Villalobos, Ana Navarro, Hanna Kmita, Joaquín Jordán



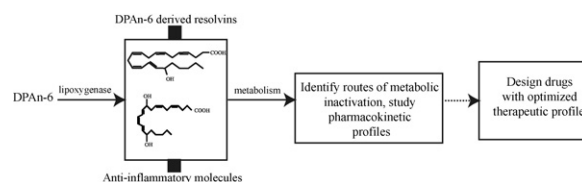
PHARMACOKINETICS AND DRUG METABOLISM

Metabolism and biological production of resolvins derived from docosapentaenoic acid (DPA_n-6) 251–260

Bindi Dangi, Marcus Obeng, Julie M. Nauroth, Gloria Chung, Eileen Bailey-Hall, Todd Hallenbeck, Linda M. Arterburn

Martek Biosciences Corp., 6480 Dobbin Road, Columbia, MD 21045, USA

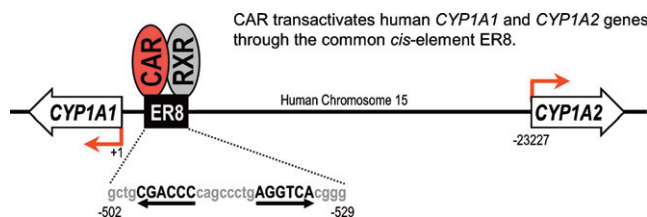
17S-HDPA_n-6 and 10S,17S-HDPA_n-6 are resolvins produced from DPA_n-6 by the action of lipoxygenase. Analysis of the metabolic stability and identification of metabolites of these compounds could play an important role in the design of better analogs with longer durations of action and hence better efficacy.



Constitutive androstane receptor transcriptionally activates human *CYP1A1* and *CYP1A2* 261–269 genes through a common regulatory element in the 5'-flanking region

Kouichi Yoshinari, Noriaki Yoda, Takayoshi Toriyabe, Yasushi Yamazoe

Division of Drug Metabolism and Molecular Toxicology, Graduate School of Pharmaceutical Sciences, Tohoku University, 6-3 Aramaki-aoba, Aoba-ku, Sendai, Miyagi 980-8578, Japan

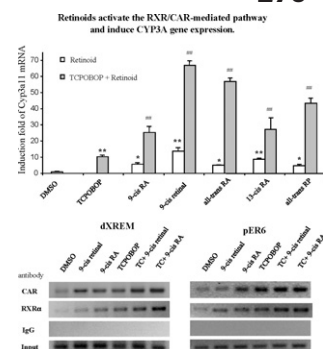


Retinoids activate RXR/CAR-mediated pathway and induce *CYP3A*

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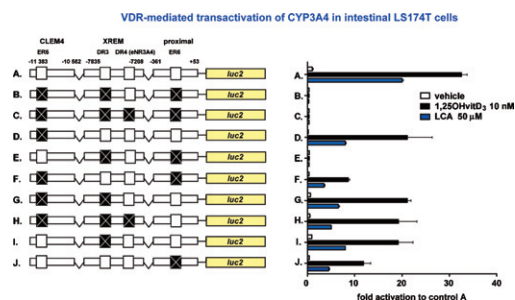
Shiyong Chen, Kun Wang, Yu-Jui Yvonne Wan

Department of Pharmacology, Toxicology, and Therapeutics, University of Kansas Medical Center, Biomedical Research Center Building/KLSIC, 2146 W 39th Avenue, Kansas City, KS 66160, USA



Intestinal cell-specific vitamin D receptor (VDR)-mediated transcriptional regulation of *CYP3A4* gene

Petr Pavek, Katerina Pospechova, Lucie Svecova, Zdenka Syrova, Lucie Stejskalova, Jana Blazkova, Zdenek Dvorak, Jaroslav Blahos

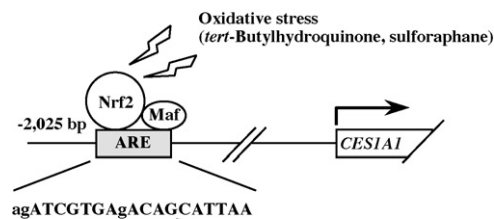


Transcriptional regulation of human carboxylesterase 1A1 by nuclear factor-erythroid 2 related factor 2 (Nrf2)

Taiga Maruichi, Tatsuki Fukami, Miki Nakajima, Tsuyoshi Yokoi

Drug Metabolism and Toxicology, Faculty of Pharmaceutical Sciences, Kanazawa University, Kakuma-machi, Kanazawa 920-1192, Japan

Human CES1A1 is transactivated through binding of Nrf2 to the antioxidant response element at -2025 bp.



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