



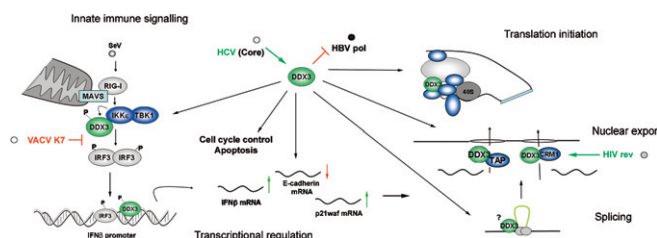
Biochemical Pharmacology, Volume 79, issue 3, 1 February 2010

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COMMENTARY

Human DEAD-box protein 3 has multiple functions in gene regulation and cell cycle control and is a prime target for viral manipulation 297–306

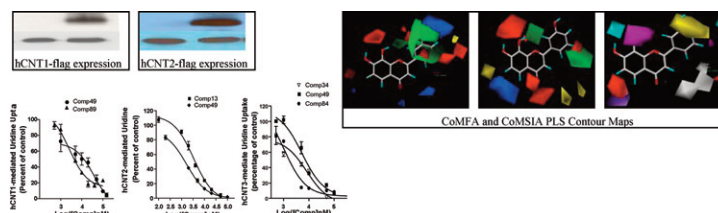
Martina Schröder



ANTIBIOTICS AND CHEMOTHERAPEUTICS

Interaction of benzopyranone derivatives and related compounds with human concentrative nucleoside transporters 1, 2 and 3 heterologously expressed in porcine PK15 nucleoside transporter deficient cells. Structure–activity relationships and determinants of transporter affinity and selectivity 307–320

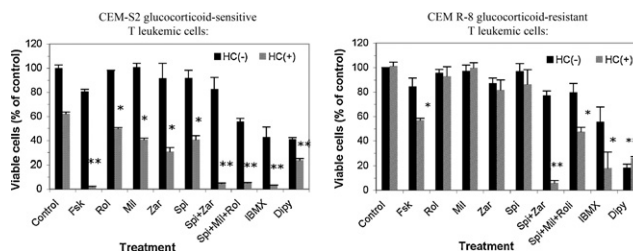
Chunmei Wang, Surekha Pimple, John K. Buolamwini



Inhibition of PDE3, PDE4 and PDE7 potentiates glucocorticoid-induced apoptosis and overcomes glucocorticoid resistance in CEM T leukemic cells 321–329

Hongli Dong, Christof Zitt, Cornelia Auriga, Armin Hatzelmann, Paul M. Epstein

This paper concerns the targeting of cyclic nucleotide phosphodiesterases (PDEs) to induce apoptosis and overcome glucocorticoid resistance of leukemic cells.



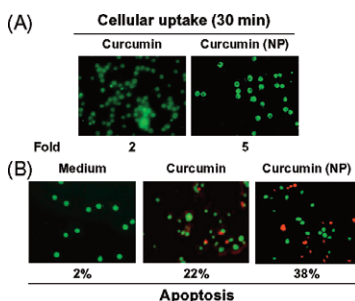
HC=glucocorticoid, hydrocortisone; Fak=adenylyl cyclase activator, forskolin; Rol=PDE4 inhibitor, rolipram; Mil=PDE3 inhibitor, milrinone; Zar=PDE3/4 inhibitor, zardaverine; Spi=PDE7 inhibitor, spiroquinazolinone; IBMX=general PDE inhibitor, isobutylmethylxanthine; Dipy=general PDE inhibitor, dipyradimole

Design of curcumin-loaded PLGA nanoparticles formulation with enhanced cellular uptake, and increased bioactivity *in vitro* and superior bioavailability *in vivo*

330–338

Preetha Anand, Hareesh B. Nair, Bokyoung Sung, Ajaikumar B. Kunnumakkara, Vivek R. Yadav, Rajeshwar R. Tekmal, Bharat B. Aggarwal

Encapsulation of curcumin into nanoparticles (NP) enhances its cellular uptake (panel A) and its apoptotic effects (panel B).

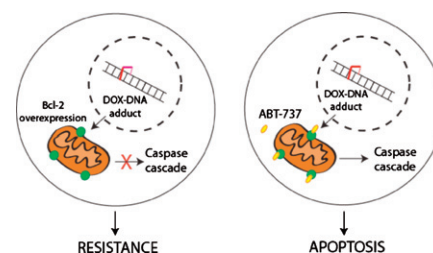


ABT-737 overcomes Bcl-2 mediated resistance to doxorubicin–DNA adducts

339–349

Michal Ugarenko, Abraham Nudelman, Ada Rephaeli, Ken-Ichi Kimura, Don R. Phillips, Suzanne M. Cutts

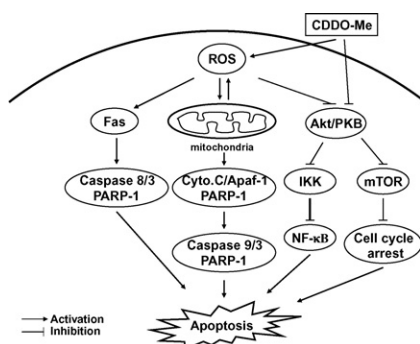
Bcl-2 overexpressing HL-60 cells are resistant to doxorubicin–DNA adduct forming treatments. The addition of the Bcl-2 inhibitor ABT-737 was able to overcome this resistance and induce apoptosis.



Oleanane triterpenoid CDDO-Me inhibits growth and induces apoptosis in prostate cancer cells through a ROS-dependent mechanism

350–360

Dorrah Deeb, Xiaohua Gao, Hao Jiang, Branislava Janic, Ali S. Arbab, Yon Rojanasakul, Scott A. Dulchavsky, Subhash C. Gautam

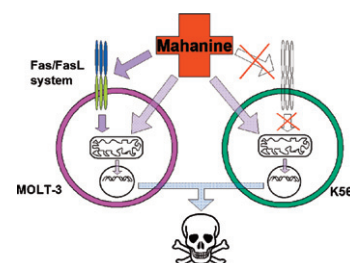


Schematic depiction of effects of CDDO-Me leading to apoptosis and inhibition of pro-survival Akt, mTOR and NF-κB.

Apoptotic effects of mahanine on human leukemic cells are mediated through crosstalk between Apo-1/Fas signaling and the Bid protein and via mitochondrial pathways

361–372

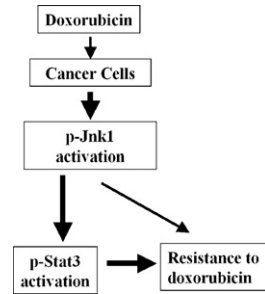
Kaushik Bhattacharya, Suman K. Samanta, Rakshamani Tripathi, Asish Mallick, Sarmila Chandra, Bikas C. Pal, Chandrima Shaha, Chitra Mandal



Jnk signaling pathway-mediated regulation of Stat3 activation is linked to the development of doxorubicin resistance in cancer cell lines

373–380

Ju-Hwa Kim, Seok Chul Lee, Jungsil Ro, Han Sung Kang, Hyung Sik Kim, Sungpil Yoon

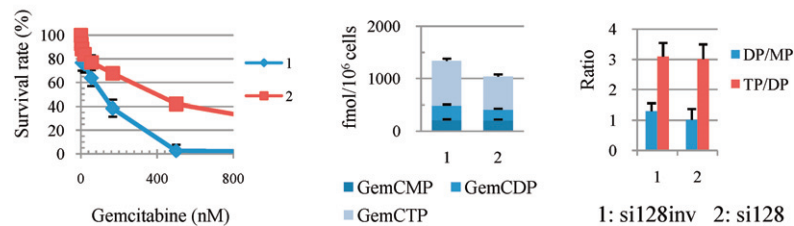


Modulation of human UMP/CMP kinase affects activation and cellular sensitivity of deoxycytidine analogs

381–388

Jieh-Yuan Liou, Hui-Ru Lai, Chih-Hung Hsu, Wei-Ling Chang, Mei-Ju Hsieh, Yu-Chun Huang, Yung-Chi Cheng

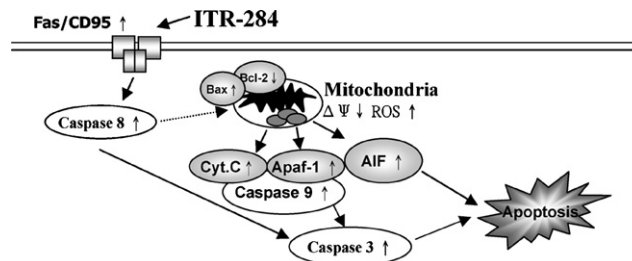
Decreased levels of UMP/CMP kinase as a mechanism of gemcitabine resistance



Investigation of anti-leukemia molecular mechanism of ITR-284, a carboxamide analog, in leukemia cells and its effects in WEHI-3 leukemia mice

389–398

Yen-Fang Wen, Jai-Sing Yang, Sheng-Chu Kuo, Chrong-Shiong Hwang, Jing-Gung Chung, Hsi-Chin Wu, Wen-Wen Huang, Jia-Hua Jhan, Chung-Ming Lin, Hui-Jye Chen

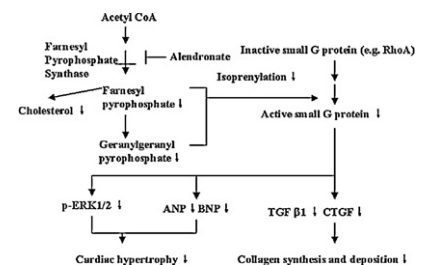


CARDIOVASCULAR PHARMACOLOGY

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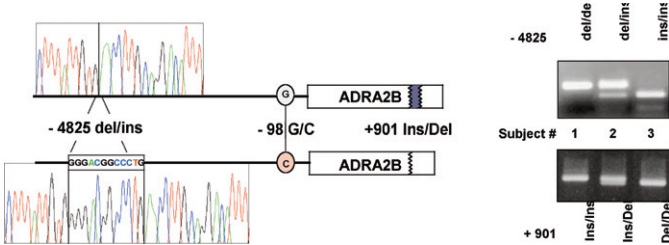
Liang Li, Guo-Ping Chen, Yin Yang, Yang Ye, Lei Yao, Shen-Jiang Hu



Identification of a novel 12-nucleotide insertion polymorphism in the promoter region of ADRA2B: Full linkage with the 9-nucleotide deletion in the coding region and influence on transcriptional activity

407–412

Pierre-Antoine Crassous, Régis Blaise, Amélie Marquette, Amir Snapir, Mika Scheinin, Hervé Paris, Stéphane Schaak

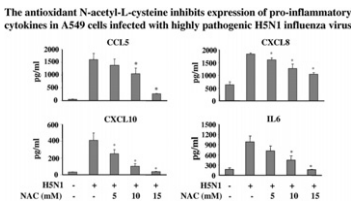


INFLAMMATION AND IMMUNOPHARMACOLOGY

N-acetyl-L-cysteine (NAC) inhibits virus replication and expression of pro-inflammatory molecules in A549 cells infected with highly pathogenic H5N1 influenza A virus

413–420

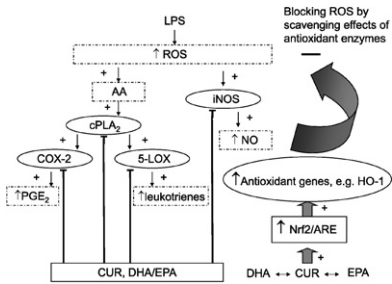
Janina Geiler, Martin Michaelis, Patrizia Naczek, Anke Leutz, Klaus Langer, Hans-Wilhelm Doerr, Jindrich Cinatl Jr.



Synergistic anti-inflammatory effects of low doses of curcumin in combination with polyunsaturated fatty acids: Docosahexaenoic acid or eicosapentaenoic acid

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Constance Lay Lay Saw, Ying Huang, Ah-Ng Kong

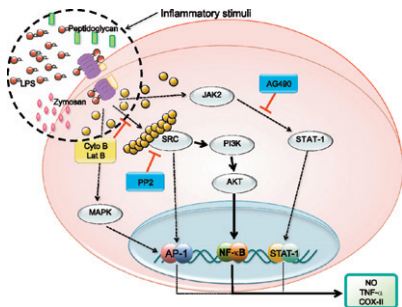


Src-mediated regulation of inflammatory responses by actin polymerization

431–443

Joo Young Kim, Yong Gyu Lee, Mi-Yeon Kim, Se Eun Byeon, Man Hee Rhee, Jongsun Park, David R. Katz, Benjamin M. Chain, Jae Youl Cho

Actin cytoskeleton disruption by cytochalasin B mainly blocked the NF-κB-mediated production of inflammatory mediators via the inhibition of Src kinase activity.

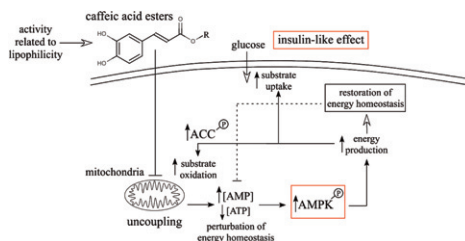


METABOLIC DISORDERS AND ENDOCRINOLOGY

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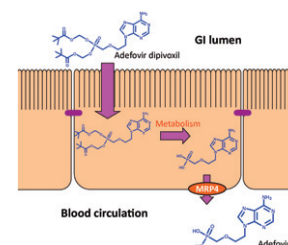


PHARMACOKINETICS AND DRUG METABOLISM

Role of basolateral efflux transporter MRP4 in the intestinal absorption of the antiviral drug adefovir dipivoxil

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Xin Ming, Dhiren R. Thakker

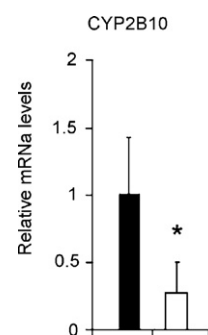


Werner's syndrome helicase participates in transcription of phenobarbital-inducible CYP2B genes in rat and mouse liver

463–470

Antoine Amaury Lachaud, Sacha Auclair-Vincent, Laurent Massip, Étienne Audet-Walsh, Michel Lebel, Alan Anderson

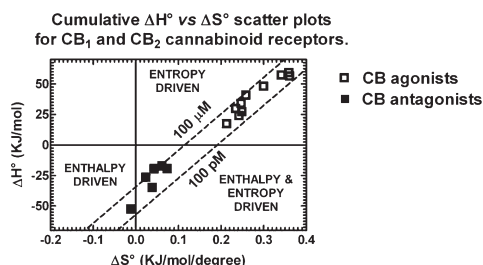
CYP2B10 mRNA level is reduced in mice that carry a homozygous deletion in the Werner helicase domain.



Binding thermodynamics at the human cannabinoid CB₁ and CB₂ receptors

471–477

Stefania Merighi, Carolina Simioni, Stefania Gessi, Katia Varani, Pier Andrea Borea



TOXICOLOGY

Bradykinin-related peptides in the venom of the solitary wasp *Cyphononyx fulvognathus* 478–486

Gisele Picolo, Miki Hisada, Analuê B. Moura, Maurício F.M. Machado, Juliana M. Sciani, Isaltino M. Conceição, Robson L. Melo, Vitor Oliveira, Maria Teresa R. Lima-Landman, Yara Cury, Katsuhiro Konno, Mirian A.F. Hayashi

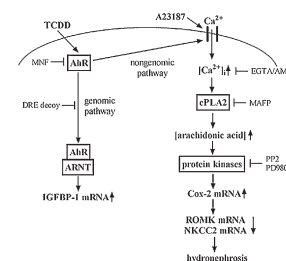
Biochemical and pharmacological characterization of novel bradykinin-related peptides (BRP) named Cd-146, Thr6-BK, fulvonin and cyphokinin isolated from the venom of the solitary wasp *Cyphononyx fulvognathus* is described.



TCDD-induced cyclooxygenase-2 expression is mediated by the nongenomic pathway in mouse MMDD1 macula densa cells and kidneys 487–497

Bin Dong, Noriko Nishimura, Christoph F. Vogel, Chiharu Tohyama, Fumio Matsumura

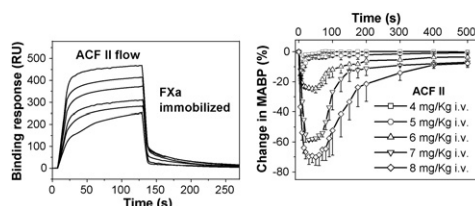
Cyclooxygenase-2 (Cox-2), which plays a critical role in hydronephrosis in mouse neonates, is induced by TCDD in mouse MMDD1 macula densa cells and kidneys through a newly discovered nongenomic pathway.



Identification of a nitric oxide-dependent hypotensive effect of anticoagulation factor II from the venom of *Agkistrodon acutus* 498–506

Dengke Shen, Xiaolong Xu, Liyun Zhang, Hao Wu, Lili Peng

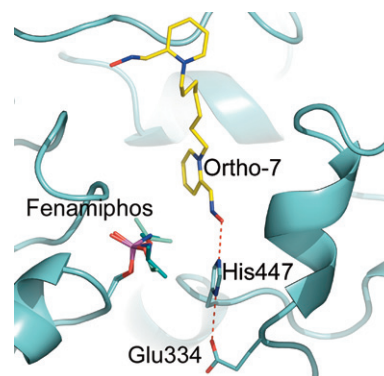
Anticoagulation factor II (ACF II) not only binds with FXa to prolong the clotting time, but also induces hypotension in rats through an endothelium-dependent vasodilation.



Crystal structures of oxime-bound fenamiphos-acetylcholinesterases: Reactivation involving flipping of the His447 ring to form a reactive Glu334–His447–oxime triad 507–515

Andreas Hörnberg, Elisabet Artursson, Rikard Wårme, Yuan-Ping Pang, Fredrik Ekström

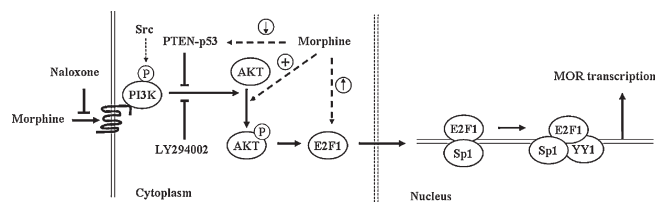
The Glu334–His447–Ortho-7 triad can function as an activator by deprotonating the hydroxyl oxygen of the oxime prior to reactivation of organophosphorus-inhibited acetylcholinesterase.



Mechanisms involved in phosphatidylinositol 3-kinase pathway mediated up-regulation of the mu opioid receptor in lymphocytes

516–523

Han Liu, Hui Li, Liyuan Guo, Mengsen Li, Chaoying Li, Shanshan Wang, Wei Jiang, Xinhua Liu, Michael A. McNutt, Gang Li



Mechanism involved in IP3K mediated regulation of the MOR gene expression in lymphocytes.
 ⊕ Activation promotion; ⊕ Transcription promotion; ⊖ Transcription inhibition

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