



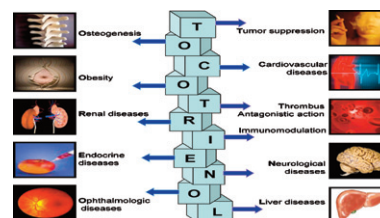
Biochemical Pharmacology, Volume 80, issue 11, 1 December 2010

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COMMENTARY

Tocotrienols, the vitamin E of the 21st century: Its potential against cancer and other chronic diseases 1613–1631

Bharat B. Aggarwal, Chitra Sundaram, Seema Prasad, Ramaswamy Kannappan

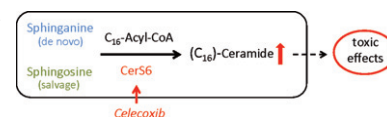


ANTIBIOTICS AND CHEMOTHERAPEUTICS

Activation of ceramide synthase 6 by celecoxib leads to a selective induction of C_{16:0}-ceramide 1632–1640

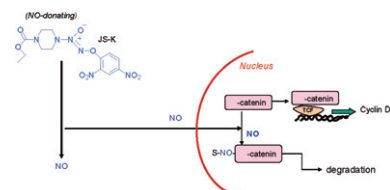
Susanne Schiffmann, Simone Ziebell, Jessica Sandner, Kerstin Birod, Klaus Deckmann, Daniela Hartmann, Sina Rode, Helmut Schmidt, Carlo Angioni, Gerd Geisslinger, Sabine Grösch

Treatment of cancer cells with celecoxib led to a significant increase of C16:0-Cer via the specific activation of ceramide synthase 6 (CerS6). The increase in C16:0-Cer contributes in part to the proapoptotic effect of celecoxib.



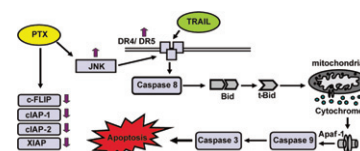
JS-K; a nitric oxide-releasing prodrug, modulates β -catenin/TCF signaling in leukemic Jurkat cells: Evidence of an S-nitrosylated mechanism 1641–1649

Niharika Nath, Mitali Chattopadhyay, Liliya Pospishil, Lucyna Z. Cieciura, Satindra Goswami, Ravinder Kodela, Joseph E. Saavedra, Larry K. Keefer, Khosrow Kashfi



1650–1661

Schematic diagram of the apoptotic pathway induced by the combined treatment with PTX and TRAIL.

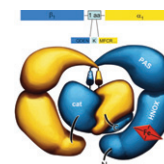


1662-1675

[illegible]

1676-1683

Nadine Haase, Tobias Haase, Jan Robert Kraehling, Soenke Behrends



1684-1689

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graph TD
    AcetylCoA[Acetyl CoA] --> HMGCoA[HMG-CoA]
    HMGCoA --> Mevalonate[Mevalonate]
    Mevalonate --> FPP[Farnesyl pyrophosphate]
    FPP --> GGPP[Geranylgeranyl Pyrophosphate]
    GGPP --> InactiveG[Inactive small G protein (GDP-RhoA)]
    InactiveG --> Isoprenylation[Isoprenylation]
    Isoprenylation --> ActiveG[Active small G protein (GTP-RhoA)]
    ActiveG --> eNOS[eNOS expression and phosphorylation]
    ActiveG --> OtherFactors[Other factors (e.g. Oxidative stress)]
    eNOS --> EndothelialFunction[Endothelium function]
    OtherFactors --> EndothelialFunction
    EndothelialFunction --> FarnesylPyrophosphateSynthase[Farnesyl Pyrophosphate Synthase]
    FarnesylPyrophosphateSynthase --> FPP
  
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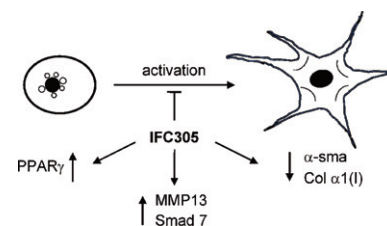
The diagram illustrates the biosynthetic pathway of geranylgeranyl pyrophosphate (GGPP) and its role in regulating endothelial function. The pathway starts with Acetyl CoA, which is converted to HMG-CoA and then Mevalonate. Mevalonate is converted to Farnesyl pyrophosphate (FPP) by the enzyme Farnesyl Pyrophosphate Synthase. FPP is then converted to GGPP by the enzyme Isoprenylation. GGPP is shown to regulate the activation of small G proteins (GDP-RhoA to GTP-RhoA). This activation leads to the expression and phosphorylation of eNOS and the presence of other factors like oxidative stress, which together regulate endothelial function. A feedback loop shows that endothelial function also influences the Farnesyl Pyrophosphate Synthase step.

GASTROINTESTINAL PHARMACOLOGY

Prevention of *in vitro* hepatic stellate cells activation by the adenosine derivative compound IFC305

1690–1699

Gabriela Velasco-Loyden, Julio Isael Pérez-Carreón, José Fernando Cabello Agüero, Pilar Cabrales Romero, Susana Vidrio-Gómez, Lidia Martínez-Pérez, Lucía Yáñez-Maldonado, Rolando Hernández-Muñoz, Marina Macías-Silva, Victoria Chagoya de Sánchez

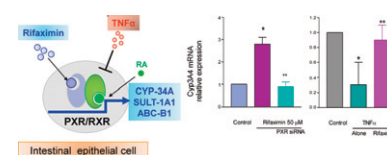


Pregnane-X-receptor mediates the anti-inflammatory activities of rifaximin on detoxification pathways in intestinal epithelial cells

1700–1707

Andrea Mencarelli, Marco Migliorati, Miriam Barbanti, Sabrina Cipriani, Giuseppe Palladino, Eleonora Distrutti, Barbara Renga, Stefano Fiorucci

Rifaximin a non-absorbable antibiotic, is a PXR ligand that increases the expression of genes involved in the metabolism and excretion of xenobiotics, antagonizing the effects of $\text{TNF}\alpha$ in human intestinal epithelial cells and colon biopsies. Abbreviations: RA, retinoic acid; CYP-3A4, cytochrome P450-3A4; SULTA1, sulfotransferase-1A1; ABC-B1, ATP binding cassette superfamily, subfamily B, member 1; PXR siRNA, small interfering RNA for PXR (pregnane-X-receptor).

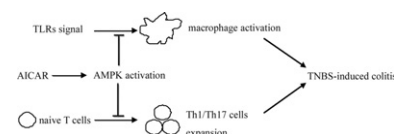


INFLAMMATION AND IMMUNOPHARMACOLOGY

AMPK agonist downregulates innate and adaptive immune responses in TNBS-induced murine acute and relapsing colitis

1708–1717

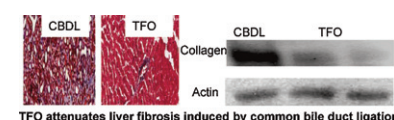
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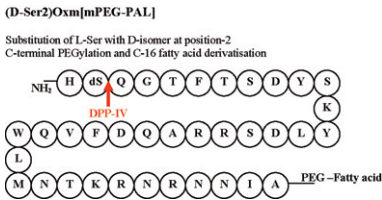
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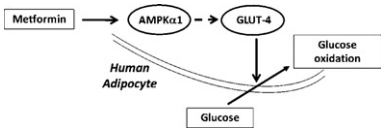
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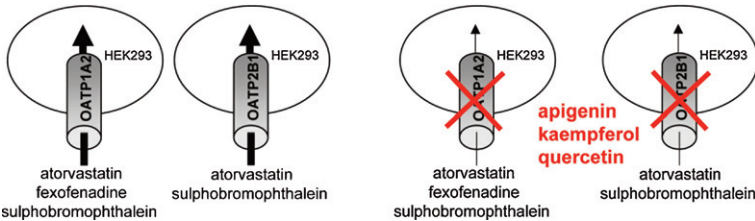
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PHARMACOKINETICS AND DRUG METABOLISM

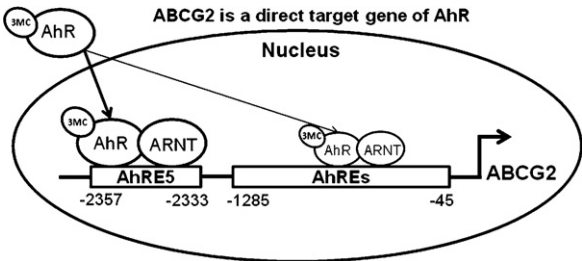
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Leslie M. Tompkins, Haishan Li, Linhao Li, Caitlin Lynch, Yi Xie, Takeo Nakanishi, Douglas D. Ross, Hongbing Wang



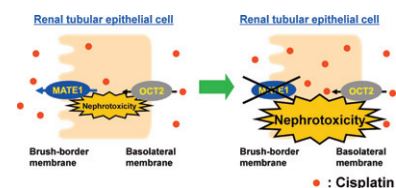
TOXICOLOGY

Disruption of multidrug and toxin extrusion MATE1 potentiates cisplatin-induced nephrotoxicity

1762–1767

Takanori Nakamura, Atsushi Yonezawa, Shinya Hashimoto, Toshiya Katsura, Ken-ichi Inui

Inhibition of MATE1 by genetic disruption and a specific inhibitor increased the renal accumulation of cisplatin and subsequently potentiated cisplatin-induced nephrotoxicity.

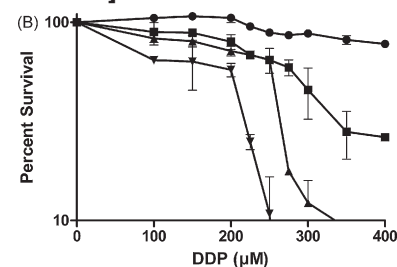


CORRIGENDUM

Corrigendum to “The role of the N-terminus of mammalian copper transporter 1 in the cellular accumulation of cisplatin” [Biochem. Pharmacol. 80 (2010) 448–454]

1768

Christopher A. Larson, Preston L. Adams, Danielle D. Jandial, Brian G. Blair, Roohangiz Safaei, Stephen B. Howell



INDEXED/ABSTRACTED IN: *Curr. Cont. ASCA, Biosis Data, CAB Inter., Chemical Abstracts Service, Curr. Cont./Life Sci., CABS, EMBASE/Excerpt. Med., Curr. Cont. ISI/BIOMED Database, MEDLINE, PASCAL-CNRS Data, Curr. Cont. Sci. Cit. Ind., Curr. Cont. SCISEARCH Data, Ind. Med., Reference Update.*
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