

CONTENTS

VOLUME 111 • NUMBER 6

CONTENTS i

FEATURES v

ARTICLES

Flashing Light Signaling Circuit in Sponges: Endogenous Light Generation After Tissue Ablation in *Suberites domuncula*

Matthias Wiens, Xiaohong Wang, Andreas Unger, Heinz C. Schröder, Vladislav A. Grebenjuk, Dario Pisignano, Klaus P. Jochum, and Werner E.G. Müller. 1377

PUBLISHED ONLINE 9 SEPTEMBER 2010

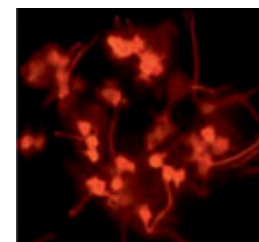


PAGE 1381

PTEN Suppression Promotes Neurite Development Exclusively in Differentiating PC12 Cells via PI3-Kinase and MAP Kinase Signaling

Lintao Jia, Shaoping Ji, Jean-Christian Maillet, and Xia Zhang. 1390

PUBLISHED ONLINE 9 SEPTEMBER 2010

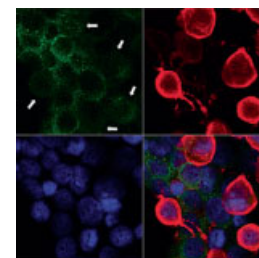


PAGE 1397

Identification of New Modulators and Protein Alterations in Non-Apoptotic Programmed Cell Death

Sabina Sperandio, Karen S. Poksay, Birgit Schilling, Danielle Crippen, Bradford W. Gibson, and Dale E. Bredesen. 1401

PUBLISHED ONLINE 9 SEPTEMBER 2010



PAGE 1407

Changes in Cell Adhesivity and Cytoskeleton-Related Proteins During Imatinib-Induced Apoptosis of Leukemic JURL-MK1 Cells

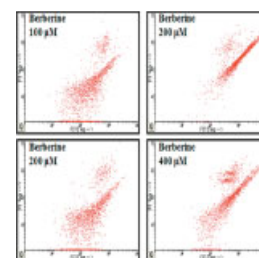
K. Kuželová, M. Pluskalová, D. Grebeňová, K. Pavlásková, P. Halada, and Z. Hrkal. 1413

PUBLISHED ONLINE 9 SEPTEMBER 2010

Berberine Induces Autophagic Cell Death and Mitochondrial Apoptosis in Liver Cancer Cells: The Cellular Mechanism

Ning Wang, Yibin Feng, Meifen Zhu, Chi-Man Tsang, Kwan Man, Yao Tong, and Sai-Wah Tsao. 1426

PUBLISHED ONLINE 9 SEPTEMBER 2010



PAGE 1431

Expression of Homeobox Genes in Oral Squamous Cell Carcinoma Cell Lines Treated With All-*Trans* Retinoic Acid

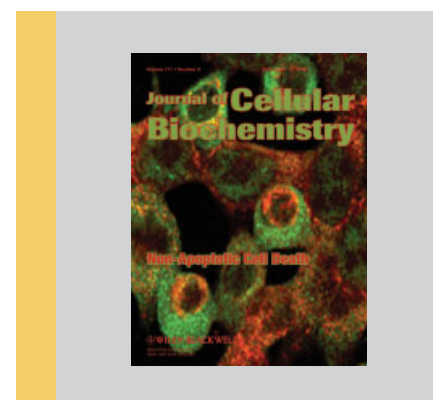
Thais Acquafreda, Fabio Daumas Nunes, Dianne Robert Soprano, and Kenneth J. Soprano. 1437

PUBLISHED ONLINE 9 SEPTEMBER 2010

Low-Level Laser Irradiation Enhances BMP-Induced Osteoblast Differentiation by Stimulating the BMP/Smad Signaling Pathway

Shizu Hirata, Chiaki Kitamura, Hidefumi Fukushima, Ikuo Nakamichi, Yoshimitsu Abiko, Masamichi Terashita, and Eijiro Jimi. 1445

PUBLISHED ONLINE 9 SEPTEMBER 2010

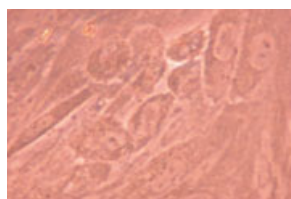


Cover: Cover shows confocal imaging following immunofluorescence staining for prohibitin in 293T cells. See article in this issue by Sperandio et al, pages 1401–1412.

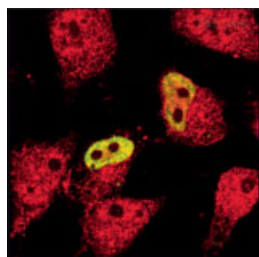
(continued on next page)

CONTENTS

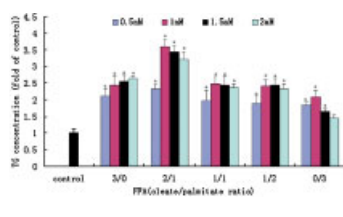
C O N T I N U E D



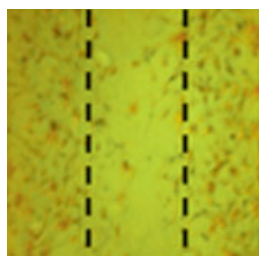
PAGE 1458



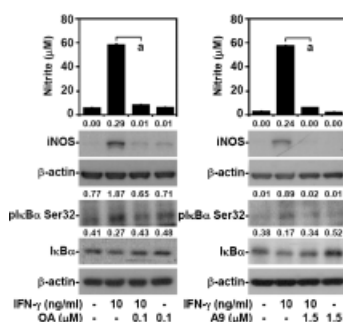
PAGE 1468



PAGE 1485



PAGE 1505



PAGE 1516

Anti-Fibrotic Effect of Chorionic Plate-derived Mesenchymal Stem Cells Isolated from Human Placenta in a Rat Model of CCl₄-injured Liver: Potential Application to the Treatment of Hepatic Diseases
Min-Jae Lee, Jieun Jung, Kyu-Hwan Na, Ji Suk Moon, Hey-Jin Lee, Jae-Hwan Kim, Gwang Il Kim, Sung-Won Kwon, Seong-Gyu Hwang, and Gi Jin Kim. **1453**
 PUBLISHED ONLINE 9 SEPTEMBER 2010

Sorting Nexin 6 Interacts With Breast Cancer Metastasis Suppressor-1 and Promotes Transcriptional Repression
José Rivera, Diego Megías, and Jerónimo Bravo **1464**
 PUBLISHED ONLINE 9 SEPTEMBER 2010

Effect of Cleidocranial Dysplasia-Related Novel Mutation of RUNX2 on Characteristics of Dental Pulp Cells and Tooth Development
DongYing Xuan, Xi Sun, YuXia Yan, BaoYi Xie, PingPing Xu, and JinCai Zhang **1473**
 PUBLISHED ONLINE 24 SEPTEMBER 2010

Screening and Identification of Differentially Expressed Genes in Goose Hepatocytes Exposed to Free Fatty Acid
Zhixiong Pan, Jiwen Wang, Bo Kang, Lizhi Lu, Chunchun Han, Hui Tang, Liang Li, Feng Xu, Zehui Zhou, and Jia LV **1482**
 PUBLISHED ONLINE 24 SEPTEMBER 2010

Insulin Stimulates Gene Expression of Ferritin Light Chain in Osteoblast Cells
Su Hee Han, Sethuraman Odathurai Saminathan, and Sung-Jin Kim **1493**
 PUBLISHED ONLINE 24 SEPTEMBER 2010

Betulinic Acid Inhibits High Glucose-Induced Vascular Smooth Muscle Cells Proliferation and Migration
Jung Joo Yoon, Yun Jung Lee, Jin Sook Kim, Dae Gill Kang, and Ho Sub Lee **1501**
 PUBLISHED ONLINE 24 SEPTEMBER 2010

Protective Effects of 20-Hydroxyecdysone on CoCl₂-Induced Cell Injury in PC12 Cells
J. Hu, T.Z. Zhao, W.H. Chu, C.X. Luo, W.H. Tang, L. Yi, and H. Feng **1512**
 PUBLISHED ONLINE 24 SEPTEMBER 2010

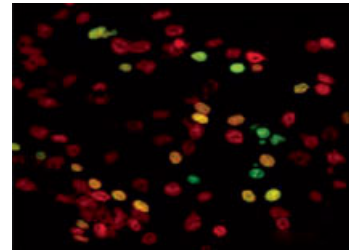
(continued on next page)

Glycogen Synthase Kinase-3 β Indirectly Facilitates Interferon- γ -Induced Nuclear Factor- κ B Activation and Nitric Oxide Biosynthesis
Jui-In Kai, Wei-Ching Huang, Cheng-Chieh Tsai, Wen-Teng Chang, Chia-Ling Chen, and Chiou-Feng Lin. 1522
 PUBLISHED ONLINE 24 SEPTEMBER 2010

CONTENTS

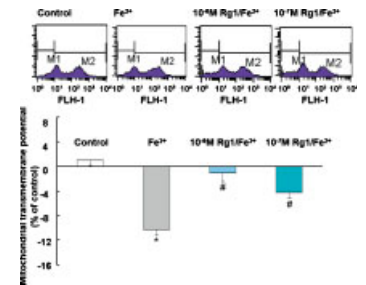
C O N T I N U E D

Osteoclastogenic Activity and RANKL Expression Are Inhibited in Osteoblastic Cells Expressing Constitutively Active G α_{12} or Constitutively Active RhoA
Jun Wang and Paula H. Stern 1531
 PUBLISHED ONLINE 24 SEPTEMBER 2010



PAGE 1526

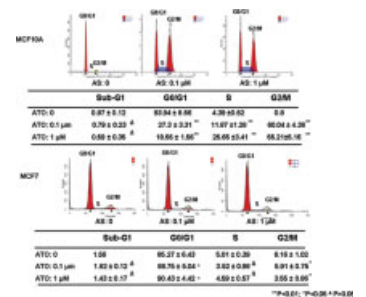
Rg1 Protects Iron-Induced Neurotoxicity Through Antioxidant and Iron Regulatory Proteins in 6-OHDA-Treated MES23.5 Cells
Huamin Xu, Hong Jiang, Jun Wang, and Junxia Xie. 1537
 PUBLISHED ONLINE 24 SEPTEMBER 2010



PAGE 1540

Activation of the p38 MAPK/Akt/ERK1/2 Signal Pathways Is Required for the Protein Stabilization of CDC6 and Cyclin D1 in Low-Dose Arsenite-Induced Cell Proliferation
Youhong Liu, Janet M. Hock, Con Sullivan, Geying Fang, Allison J. Cox, Kathleen T. Davis, Bruce H. Davis, and Xiong Li 1546
 PUBLISHED ONLINE 22 SEPTEMBER 2010

Selenium Suppressed Hydrogen Peroxide-Induced Vascular Smooth Muscle Cells Calcification Through Inhibiting Oxidative Stress and ERK Activation
Hongmei Liu, Qian Lu, and Kaixun Huang. 1556
 PUBLISHED ONLINE 4 NOVEMBER 2010



PAGE 1550

Integrin Beta1 Over-Expression Associates With Resistance to Tyrosine Kinase Inhibitor Gefitinib in Non-Small Cell Lung Cancer
Lixia Ju, Caicun Zhou, Wei Li, and Linghua Yan 1565
 PUBLISHED ONLINE 4 NOVEMBER 2010

Prolonged Nrf1 Overexpression Triggers Adipocyte Inflammation and Insulin Resistance
Florence H. van Tienen, Patrick J. Lindsey, Carla J. van der Kallen, and Hubert J. Smeets. 1575
 PUBLISHED ONLINE 4 NOVEMBER 2010

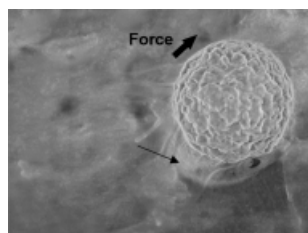


PAGE 1569

(continued on next page)

CONTENTS

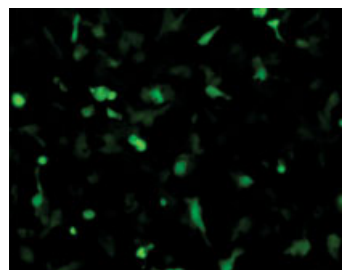
C O N T I N U E D



PAGE 1589

Mechanical Integrin Stress and Magnetic Forces Induce Biological Responses in Mesenchymal Stem Cells Which Depend on Environmental Factors
Annika Kasten, Petra Müller, Ulrike Bulnheim, Jürgen Groll, Kristina Bruellhoff, Ulrich Beck, Gustav Steinhoff, Martin Möller, and Joachim Rychly. 1586
PUBLISHED ONLINE 4 NOVEMBER 2010

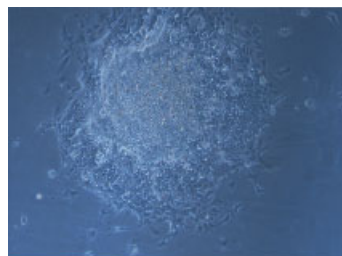
C-terminal Domain of p16^{INK4a} is Adequate in Inducing Cell Cycle Arrest, Growth Inhibition and CDK4/6 Interaction Similar to the Full Length Protein in HT-1080 Fibrosarcoma Cells
Najmeh Fahham, Soroush Sardari, Seyed Nasser Ostad, Behrouz Vaziri, and Mohammad Hossein Ghahremani. 1598
PUBLISHED ONLINE 4 NOVEMBER 2010



PAGE 1602

A Coding RNA Segment That Enhances the Ribosomal Recruitment of Chicken *ccn1* mRNA
Yoshiki Mukudai, Satoshi Kubota, Takanori Eguchi, Kumi Sumiyoshi, Danilo Janune, Seiji Kondo, Satoru Shintani, and Masaharu Takigawa. 1607
PUBLISHED ONLINE 4 NOVEMBER 2010

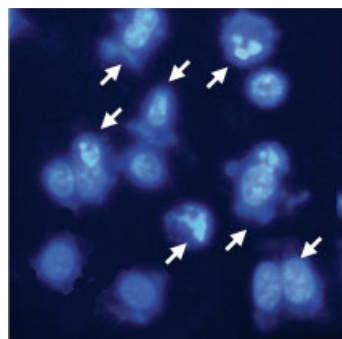
Mitogen-Activated Protein Kinase in Endothelin-1-Induced Cardiac Differentiation of Mouse Embryonic Stem Cells
Ming Chen, Yong-Qing Lin, Shuang-Lun Xie, and Jing-Feng Wang. 1619
PUBLISHED ONLINE 4 NOVEMBER 2010



PAGE 1621

Different Apoptotic Effects of Wogonin Via Induction of H₂O₂ Generation and Ca²⁺ Overload in Malignant Hepatoma and Normal Hepatic Cells
Libin Wei, Na Lu, Qinsheng Dai, Jingjing Rong, Yan Chen, Zhiyu Li, Qidong You, and Qinglong Guo. 1629
PUBLISHED ONLINE 4 NOVEMBER 2010

Chronic Exposure of Bone Morphogenetic Protein-2 Favors Chondrogenic Expression in Human Articular Chondrocytes Amplified in Monolayer Cultures
S. Claus, E. Aubert-Foucher, M. Demoor, B. Camuzeaux, A. Paumier, M. Piperno, O. Damour, M. Duterque-Coquillaud, P. Galéra, and F. Mallein-Gerin. 1642
PUBLISHED ONLINE 4 NOVEMBER 2010



PAGE 1632

Anti-Inflammatory Activity of *Eugenia punicifolia* Extract on Muscular Lesion of *mdx* Dystrophic Mice
Paulo Emilio Corrêa Leite, Kessiane Belshoff de Almeida, Jussara Lagrota-Candido, Pablo Trindade, Rafael Ferreira da Silva, Manuel Gustavo L. Ribeiro, Katia G. Lima-Araújo, Wilson C. Santos, and Thereza Quirico-Santos 1652
PUBLISHED ONLINE 4 NOVEMBER 2010

Macrophage Inflammatory Protein-1 α Induces Osteoclast Formation by Activation of the MEK/ERK/c-Fos Pathway and Inhibition of the p38MAPK/IRF-3/IFN- β Pathway
Masanobu Tsubaki, Chisato Kato, Ai Isono, Junichi Kaneko, Misako Isozaki, Takao Satou, Tatsuki Itoh, Yasuhiro Kidera, Yoshihiro Tanimori, Masashi Yanae, and Shozo Nishida 1661
PUBLISHED ONLINE 4 NOVEMBER 2010