

# CONTENTS

VOLUME 111 • NUMBER 5

CONTENTS ..... i

FEATURES ..... v

### VIEW POINTS

#### WNT Unrelated Activities in Commercially Available Preparations of Recombinant WNT3a

*Lukas Cajanek, Linda Adlerz, Vitezslav Bryja, and Ernest Arenas* ..... 1077

PUBLISHED ONLINE 21 JULY 2010

#### Revisiting Ancient mtDNA Equid Sequences From Pompeii

*Susan M.R. Gurney* ..... 1080

PUBLISHED ONLINE 29 OCTOBER 2010

### PROSPECTS

#### Activation of Signal Pathways and the Resistance to Anti-EGFR Treatment in Colorectal Cancer

*Jiezhong Chen, Xu-Feng Huang, and Andrew Katsifis* ..... 1082

PUBLISHED ONLINE 4 NOVEMBER 2010

#### PRL-3 Phosphatase and Cancer Metastasis

*Abdul Qader O. Al-Aidaroos and Qi Zeng* ..... 1087

PUBLISHED ONLINE 4 NOVEMBER 2010

### ARTICLES

#### A New Nuclear Protease With Cathepsin L Properties Is Present in HeLa and Caco-2 Cells

*Marcia Puchi, Jenaro García-Huidobro, Candy Cordova, Rodrigo Aguilar, Estefanie Dufey, Maria Imschenetzky, Paula Bustos, and Violeta Morin* ..... 1099

PUBLISHED ONLINE 19 MAY 2010

#### Fyn Promotes Proliferation, Differentiation, Survival and Function of Osteoclast Lineage Cells

*Hyun-Ju Kim, Julia T. Warren, Shin-Yoon Kim, Jean C. Chappel, Carl J. DeSelm, F. Patrick Ross, Wei Zou, and Steven L. Teitelbaum* ..... 1107

PUBLISHED ONLINE 17 AUGUST 2010

#### VEGF Stimulation Enhances Livin Protein Synthesis Through mTOR Signaling

*Biao Yan, Men Kong, Shi Chen, and Yi-han Chen* ..... 1114

PUBLISHED ONLINE 17 AUGUST 2010

#### Recycling and LFA-1-Dependent Trafficking of ICAM-1 to the Immunological Synapse

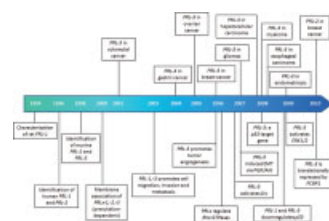
*Jae-Hyeok Jo, Min-Sung Kwon, Hyang-Ok Choi, Hyun-Mee Oh, Hyang-Jin Kim, and Chang-Duk Jun* ..... 1125

PUBLISHED ONLINE 2 AUGUST 2010

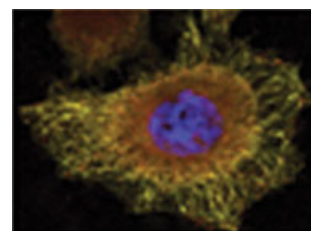
**Cover:** The cover shows amino acid sequence alignment of known and predicted PRL-3 homologues across different species. Key functional motifs of PRLs are boxed and labeled. Amino acids common to all species are shaded. See Prospect in this issue by Al-Aidaroos and Zeng, pages 1087–1098.



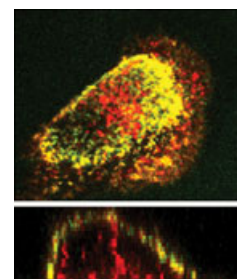
PAGE 1080



PAGE 1088



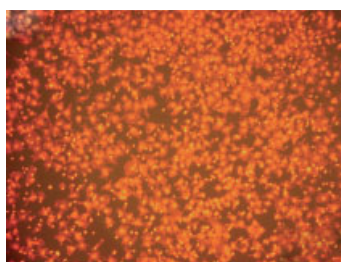
PAGE 1103



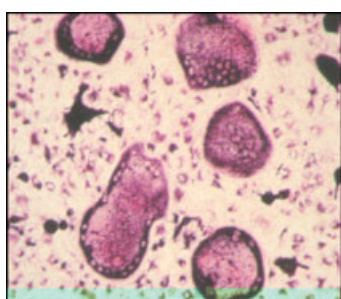
PAGE 1129



(continued on next page)



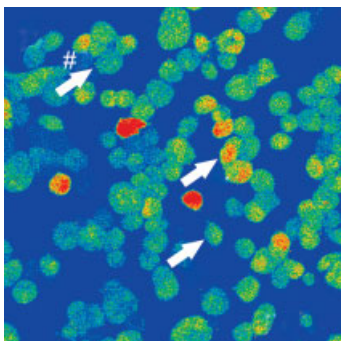
PAGE 1144



PAGE 1181



PAGE 1195



PAGE 1225

**Osteoblasts Are a Major Source of Inflammatory Cytokines in the Tumor Microenvironment of Bone Metastatic Breast Cancer**  
*Karen M. Bussard, David J. Venzon, and Andrea M. Mastro* . . . . . 1138  
PUBLISHED ONLINE 3 AUGUST 2010

**Demethyl Fructulin A (SCO-1) Causes Apoptosis by Inducing Reactive Oxygen Species in Mitochondria**  
*Massimiliano Monticone, Angela Bisio, Antonio Daga, Paolo Giannoni, Walter Giaretti, Massimo Maffei, Ulrich Pfeffer, Francesco Romeo, Rodolfo Quarto, Giovanni Romussi, Giorgio Corte, and Patrizio Castagnola* . . . . . 1149  
PUBLISHED ONLINE 3 AUGUST 2010

**Lysyl Oxidase Propeptide Sensitizes Pancreatic and Breast Cancer Cells to Doxorubicin-Induced Apoptosis**  
*Chengyin Min, Yingshe Zhao, Mathilde Romagnoli, Philip C. Trackman, Gail E. Sonenshein, and Kathrin H. Kirsch* . . . . . 1160  
PUBLISHED ONLINE 17 AUGUST 2010

**c-Cbl Regulates Glioma Invasion Through Matrix Metalloproteinase 2**  
*Hojin Lee and Alexander Y. Tsygankov* . . . . . 1169  
PUBLISHED ONLINE 17 AUGUST 2010

**Microarray Profile of Gene Expression During Osteoclast Differentiation in Modelled Microgravity**  
*Yuvaraj Sambandam, Jeremy J. Blanchard, Giffin Daughtridge, Robert J. Kolb, Srinivasan Shanmugarajan, Subramanya N. M. Pandravadra, Ted A. Bateman, and Sakamuri V. Reddy* . . . . . 1179  
PUBLISHED ONLINE 17 AUGUST 2010

**Capacitance Suppression by Mouse Seminal Vesicle Autoantigen Involves a Decrease in Plasma Membrane Ca<sup>2+</sup>-ATPase (PMCA)-Mediated Intracellular Calcium**  
*Shing-Hwa Lu, Yuan-Kuei Yen, Thai-Yen Ling, Kur-Ta Cheng, Jye-An Shu, Heng-Kien Au, and Yen-Hua Huang* . . . . . 1188  
PUBLISHED ONLINE 17 AUGUST 2010

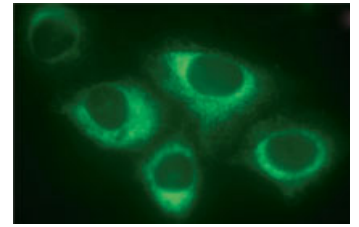
**Hedgehog Signaling and Osteogenic Differentiation in Multipotent Bone Marrow Stromal Cells Are Inhibited by Oxidative Stress**  
*Woo-Kyun Kim, Vicente Meliton, Noam Bourquard, Theodore J. Hahn, and Farhad Parhami* . . . . . 1199  
PUBLISHED ONLINE 17 AUGUST 2010

**Both FGF23 and Extracellular Phosphate Activate Raf/MEK/ERK Pathway via FGF Receptors in HEK293 Cells**  
*Miwa Yamazaki, Keiichi Ozono, Tomoko Okada, Kanako Tachikawa, Hiroki Kondou, Yasuhisa Ohata, and Toshimi Michigami* . . . . . 1210  
PUBLISHED ONLINE 17 AUGUST 2010

**Thapsigargin-Induced Ca<sup>2+</sup> Increase Inhibits TGFβ1-mediated Smad2 Transcriptional Responses via Ca<sup>2+</sup>/Calmodulin-Dependent Protein Kinase II**  
*Ming Ming, Ivan Manzini, Weidong Le, Kerstin Kriegelstein, and Björn Spittau* . . . 1222  
PUBLISHED ONLINE 17 AUGUST 2010

(continued on next page)

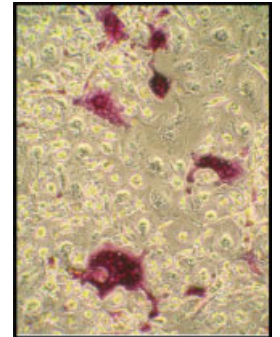
**Role of Lysyl Oxidase Propeptide in Secretion and Enzyme Activity**  
*Jessica L. Grimsby, Hector A. Lucero, Philip C. Trackman, Katya Ravid, and Herbert M. Kagan . . . . .* 1231  
PUBLISHED ONLINE 17 AUGUST 2010



PAGE 1238

**Characterization of E2F3a Function in HepG2 Liver Cancer Cells**  
*Wei Li, Guo-Xin Ni, Ping Zhang, Zheng-Xi Zhang, Wei Li, and Qiang Wu . . . . .* 1244  
PUBLISHED ONLINE 27 AUGUST 2010

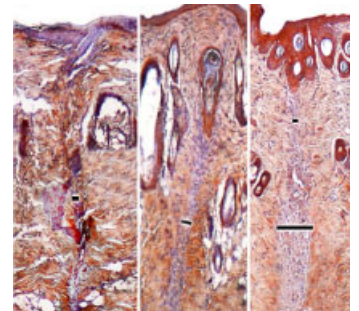
**Glypican 3 Binds to GLUT1 and Decreases Glucose Transport Activity in Hepatocellular Carcinoma Cells**  
*Hye-Sim Cho, Jung-Mo Ahn, Ho-Jae Han, and Je-Yoel Cho. . . . .* 1252  
PUBLISHED ONLINE 27 AUGUST 2010



PAGE 1263

**Compressive Mechanical Force Augments Osteoclastogenesis by Bone Marrow Macrophages Through Activation of c-Fms-Mediated Signaling**  
*Eui-Sic Cho, Keun-Soo Lee, Young-Ok Son, Yong-Suk Jang, Seung-Youp Lee, So-Yeong Kwak, Yeon-Mi Yang, Seung-Moon Park, and Jeong-Chae Lee. . . . .* 1260  
PUBLISHED ONLINE 27 AUGUST 2010

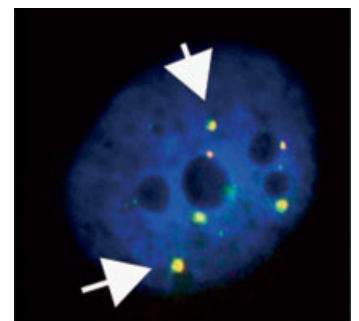
**Angiogenesis and Inflammation Signaling Are Targets of Beer Polyphenols on Vascular Cells**  
*Rita Negrão, Raquel Costa, Delfim Duarte, Tiago Taveira Gomes, Mário Mendanha, Liane Moura, Luisa Vasques, Isabel Azevedo, and Raquel Soares . . . . .* 1270  
PUBLISHED ONLINE 27 AUGUST 2010



PAGE 1276

**p53 and p21(Waf1) Are Recruited to Distinct PML-Containing Nuclear Foci in Irradiated and Nutlin-3a-Treated U2OS Cells**  
*Hong Shen and Carl G. Maki . . . . .* 1280  
PUBLISHED ONLINE 27 JULY 2010

**Regulation of Borealin by Phosphorylation at Serine 219**  
*Harpreet Kaur, Mike E. Bekier, and William R. Taylor . . . . .* 1291  
PUBLISHED ONLINE 27 AUGUST 2010



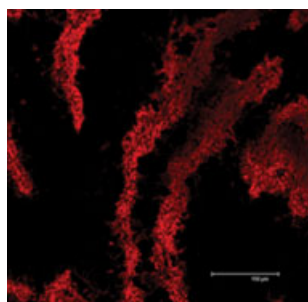
PAGE 1286

**Modulation of GEF-H1 Induced Signaling by Heparanase in Brain Metastatic Melanoma Cells**  
*Lon D. Ridgway, Michael D. Wetzel, and Dario Marchetti . . . . .* 1299  
PUBLISHED ONLINE 27 AUGUST 2010

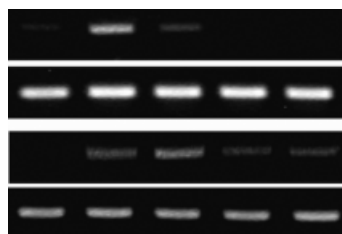
(continued on next page)

# CONTENTS

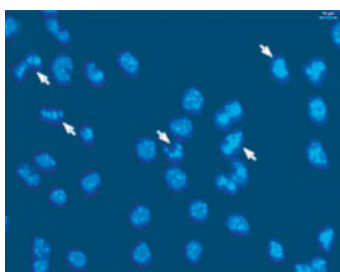
C O N T I N U E D



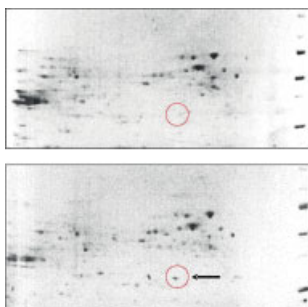
PAGE 1326



PAGE 1341



PAGE 1362



PAGE 1370

## SIRT1 Modulates High-Mobility Group Box 1-Induced Osteoclastogenic Cytokines in Human Periodontal Ligament Cells

*Young-Suk Kim, Young-Man Lee, Jae-Sang Park, Suk-Keun Lee,*

*and Eun-Cheol Kim. . . . . 1310*

PUBLISHED ONLINE 27 AUGUST 2010

## Nitric Oxide Involved in the IL-1-Induced Inhibition of Fructose Intestinal Transport

*Alberto García-Barrios, Natalia Guillén, Sonia Gascón, 1,2 Jesús Osada,*

*Carmen M<sup>a</sup> Vazquez, José Luis Miguel-Carrasco, and M<sup>a</sup> Jesús Rodríguez-Yoldi. . . 1321*

PUBLISHED ONLINE 27 AUGUST 2010

## Identification of a Functional Hepatocyte Nuclear Factor 4 Binding Site in the Neutral Ceramidase Promoter

*H. R. Maltesen, Jesper T. Troelsen, and Jørgen Olsen . . . . . 1330*

PUBLISHED ONLINE 27 AUGUST 2010

## Differential Regulation by Fucoidan of IFN- $\gamma$ -Induced NO Production in Glial cells and Macrophages

*Hang Do, Nam-Sung Kang, Suhkneung Pyo, Timothy R. Billiar, and*

*Eun-Hwa Sohn. . . . . 1337*

PUBLISHED ONLINE 9 SEPTEMBER 2010

## FGF2 Promotes Msx2 Stimulated PC-1 Expression Via Frs2/MAPK Signaling

*Yan Li, Jin Liu, Mark Hudson, Sungsu Kim, and Nan E. Hatch . . . . . 1346*

PUBLISHED ONLINE 27 AUGUST 2010

## Identification of p10 as a Neurotoxic Product Generated From the Proteolytic Cleavage of the Neuronal Cdk5 Activator

*Jenny Chew, Minghui Jessica Chen, Alan Yiu-Wah Lee, Zhao Feng Peng,*

*Kevin Wai Yin Chong, Lisheng He, Boon Huat Bay, Jian Ming Jeremy Ng, Robert Z. Qi, and Nam Sang Cheung. . . . . 1359*

PUBLISHED ONLINE 9 SEPTEMBER 2010

## Prohibitin Is a Cholesterol-Sensitive Regulator of Cell Cycle Transit

*Pei Dong, Jessica Flores, Kristine Pelton, and Keith R. Solomon. . . . . 1367*

PUBLISHED ONLINE 9 SEPTEMBER 2010

## ERRATUM

### Erratum to "The Cellular Control of DNA Double-Strand Breaks" [J Cell Biochem 2006, 99:1463-1475]

*Shaun P. Scott and Tej K. Pandita . . . . . 1375*

PUBLISHED ONLINE IN WILEY ONLINE LIBRARY