

# CONTENTS

Journal of **Cellular  
Biochemistry**

VOLUME 114 • NUMBER 2

## CONTENTS ..... i

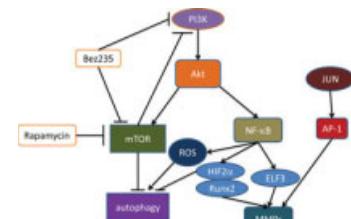
## FEATURES ..... v

## VIEW POINT

### Vertical Inhibition of the PI3K/Akt/mTOR Pathway for the Treatment of Osteoarthritis

Jiezhang Chen, Ross Crawford, and Yin Xiao ..... 245

ACCEPTED MANUSCRIPT ONLINE 28 AUGUST 2012

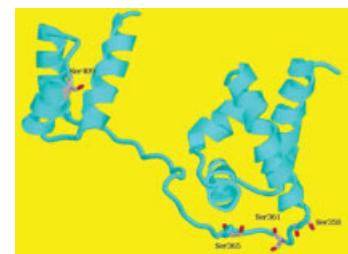


## PROSPECTS

### Aptamers: A Promising Tool for Cancer Imaging, Diagnosis, and Therapy

KuanCan Liu, BaoShun Lin, and XiaoPeng Lan ..... 250

ACCEPTED MANUSCRIPT ONLINE 4 SEPTEMBER 2012



PAGE 272

### Cell Fate Conversion: Direct Induction of Hepatocyte-Like Cells From Fibroblasts

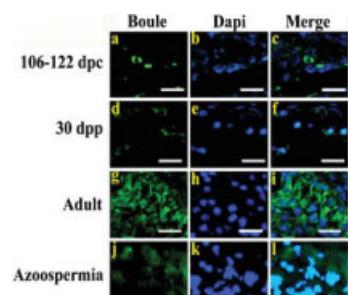
Shuyi Ji, Ludi Zhang, and Lijian Hui ..... 256

ACCEPTED MANUSCRIPT ONLINE 4 SEPTEMBER 2012

### Post-Translational Modifications in Activation and Inhibition of Oct-1-DNA Binding Complex in H2B and Other Diverse Gene Regulation: Prediction of Interplay Sites

Abdul Rauf Shakoori, Daniel C. Hoessli, and Nasir-ud-Din ..... 266

ACCEPTED MANUSCRIPT ONLINE 7 SEPTEMBER 2012



PAGE 297

## ARTICLES

### BAI, A Novel Cyclin-Dependent Kinase Inhibitor Induces Apoptosis in A549 Cells Through Activation of Caspases and Inactivation of Akt

Shin Kim, Jinho Lee, Byeong-Churl Jang, Taeg Kyu Kwon, and Jong-Wook Park ..... 282

ACCEPTED MANUSCRIPT ONLINE 8 AUGUST 2012

### Expression Pattern of Boule in Dairy Goat Testis and Its Function in Promoting the Meiosis in Male Germline Stem Cells (mGSCs)

Mingzhao Li, Chao Liu, Haijing Zhu, Junwei Sun, Meng Yu, Zhiwei Niu, Weishuai Liu, Sha Peng, and Jinlian Hua ..... 294

ACCEPTED MANUSCRIPT ONLINE 28 AUGUST 2012

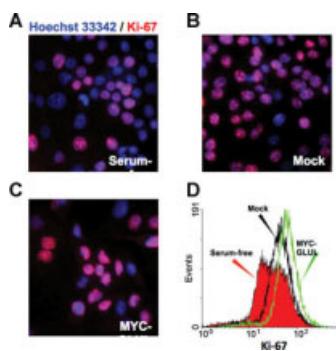
**Cover:** The Cover presents an image of fibroblast-like mesenchymal stem cells. Please see article in this issue by Guan et Al., pages 323–335. Cover designed by Lucia Sagredo Sanchez.



(continued on next page)

# CONTENTS

CONTINUED



PAGE 310

## Glutamate-Ammonia Ligase and Reduction of GO Population in PANC-1 Cells

Jong-Ho Choi, Key-Hwan Lim, Eunmi Park, Ji-Young Kim, Young-Kil Choi, and Kwang-Hyun Baek . . . . .

303

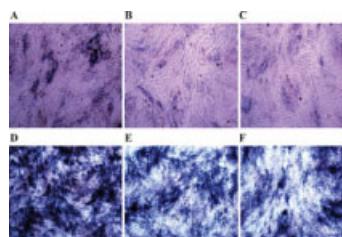
ACCEPTED MANUSCRIPT ONLINE 28 AUGUST 2012

## The Influence of RAMP1 Overexpression on CGRP-Induced Osteogenic Differentiation in MG-63 Cells In Vitro: An Experimental Study

Zhiliang Zhao, Xiaobing Fu, Gang Zhang, Yan Li, Meng Wu, and Yinghui Tan . . . . .

314

ACCEPTED MANUSCRIPT ONLINE 4 SEPTEMBER 2012



PAGE 320

## Mesenchymal Stem Cells Protect Cigarette Smoke-Damaged Lung and Pulmonary Function Partly via VEGF-VEGF Receptors

Xiao-Jun Guan, Lin Song, Feng-Feng Han, Zhi-Lei Cui, Xi Chen, Xue-Jun Guo, and Wei-Guo Xu . . . . .

323

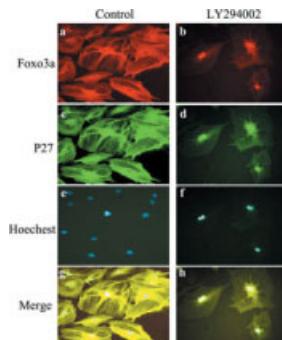
ACCEPTED MANUSCRIPT ONLINE 4 SEPTEMBER 2012

## Anti-Inflammatory Activities of Isorhamnetin-3-O-Galactoside Against HMGB1-Induced Inflammatory Responses in Both HUVECs and CLP-Induced Septic Mice

Tae Hoon Kim, Sae-Kwang Ku, and Jong-Sup Bae . . . . .

336

ACCEPTED MANUSCRIPT ONLINE 28 AUGUST 2012



PAGE 363

## LIGHT Regulates the Adipogenic Differentiation of Mesenchymal Stem Cells

Changlong Liu, Huawei Ding, Wenbo Zhu, Shaojie Jiang, Jianrong Xu, and Gang-Ming Zou . . . . .

346

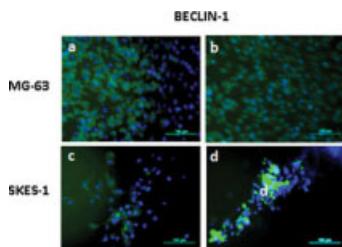
ACCEPTED MANUSCRIPT ONLINE 28 AUGUST 2012

## FOXO3a/p27<sup>kip1</sup> Expression and Essential Role After Acute Spinal Cord Injury in Adult Rat

Shuangwei Zhang, Weipeng Huan, Haixiang Wei, Jinlong Shi, Jinpeng Fan, Jian Zhao, Aiguo Shen, and Honglin Teng . . . . .

354

ACCEPTED MANUSCRIPT ONLINE 28 AUGUST 2012



PAGE 373

## Human Wharton's Jelly Stem Cell Conditioned Medium and Cell-Free Lysate Inhibit Human Osteosarcoma and Mammary Carcinoma Cell Growth In Vitro and In Xenograft Mice

Kalamgam Gauthaman, Chui-Yee Fong, Suganya Arularasu, Arjunan Subramanian, Arijit Biswas, Mahesh Choolani, and Ariff Bongso . . . . .

366

ACCEPTED MANUSCRIPT ONLINE 28 AUGUST 2012

# CONTENTS

CONTINUED

**Secreted Phosphoprotein-24 kDa (Spp24) Attenuates BMP-2-Stimulated Smad 1/5 Phosphorylation and Alkaline Phosphatase Induction and was Purified in a Protective Complex With Alpha2-Macroglobulins From Serum**

Ke-Wei Zhao, Samuel S. Murray, and Elsa J. Brochmann Murray ..... 378

ACCEPTED MANUSCRIPT ONLINE 4 SEPTEMBER 2012



PAGE 391

**The Effect of Rotative Stress on CALL, FAS, FASL, OSCAR, and TRAP Gene Expression in Osteoclasts**

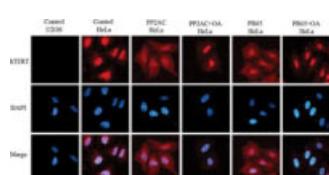
Zhang Qing Hong, Liu Meng Tao, Zhou Yi, Liu Wei, Shen Ju Xiang, and Liu Li ..... 388

ACCEPTED MANUSCRIPT ONLINE 4 SEPTEMBER 2012

**Celastrol Attenuates Adipokine Resistin-Associated Matrix Interaction and Migration of Vascular Smooth Muscle Cells**

Sang-Wook Kang, Min Soo Kim, Hyun-Sung Kim, Yunho Kim, Daekeun Shin, Jung Han Yoon Park, and Young-Hee Kang ..... 398

ACCEPTED MANUSCRIPT ONLINE 4 SEPTEMBER 2012

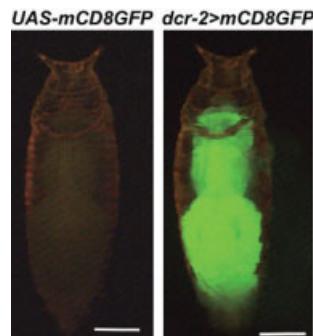


PAGE 414

**Serine/Threonine-Protein Phosphatase 2A Physically Interacts With Human Telomerase Reverse Transcriptase hTERT and Regulates Its Subcellular Distribution**

Peng Xi, Lili Zhou, Miao Wang, Jun-Ping Liu, and Yu-Sheng Cong ..... 409

ACCEPTED MANUSCRIPT ONLINE 7 SEPTEMBER 2012

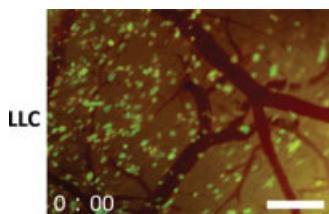


PAGE 421

**Imaging the Efficacy of UVC Irradiation on Superficial Brain Tumors and Metastasis in Live Mice at the Subcellular Level**

Masashi Momiyama, Atsushi Suetsugu, Hiroaki Kimura, Hiroyuki Kishimoto, Ryoichi Aki, Akimitsu Yamada, Harumi Sakurada, Takashi Chishima, Michael Bouvet, Itaru Endo, and Robert M. Hoffman ..... 428

ACCEPTED MANUSCRIPT ONLINE 7 SEPTEMBER 2012



PAGE 431

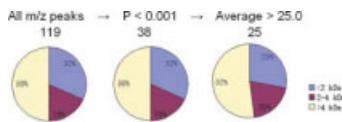
**Tezosentan Increases Nitric Oxide Signaling Via Enhanced Hydrogen Peroxide Generation in Lambs With Surgically Induced Acute Increases in Pulmonary Blood Flow**

Sanjiv Kumar, Peter E. Oishi, Ruslan Rafikov, Saurabh Aggarwal, Yali Hou, Sanjeev A. Datar, Shruti Sharma, Anthony Azakie, Jeffrey R. Fineman, and Stephen M. Black ..... 435

ACCEPTED MANUSCRIPT ONLINE 7 SEPTEMBER 2012

(continued on next page)

# CONTENTS



PAGE 451

## Serum Proteomic Profiling for the Early Diagnosis of Colorectal Cancer

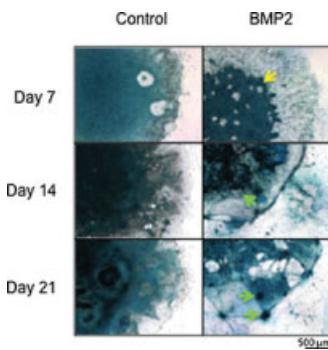
Dexiang Zhu, Jie Wang, Li Ren, Yan Li, Bin Xu, Ye Wei, Yunshi Zhong, Xinzhe Yu, Shenyong Zhai, Jianmin Xu, and Xinyu Qin ..... 448

ACCEPTED MANUSCRIPT ONLINE 7 SEPTEMBER 2012

## Platycodin D Induces Anoikis and Caspase-Mediated Apoptosis via p38 MAPK in AGS Human Gastric Cancer Cells

Jaemoo Chun, Eun Ji Joo, Minseok Kang, and Yeong Shik Kim ..... 456

ACCEPTED MANUSCRIPT ONLINE 7 SEPTEMBER 2012



PAGE 483

## Retinoic Acid and the Transcription Factor MafB Act Together and Differentially to Regulate Aggrecan and Matrix Metalloproteinase Gene Expression in Neonatal Chondrocytes

Yao Zhang and A. Catharine Ross ..... 471

ACCEPTED MANUSCRIPT ONLINE 7 SEPTEMBER 2012

## Efficient Differentiation of Human iPSC-Derived Mesenchymal Stem Cells to Chondroprogenitor Cells

Rosa M. Guzzo, Jason Gibson, Ren-He Xu, Francis Y. Lee, and Hicham Drissi ..... 480

ACCEPTED MANUSCRIPT ONLINE 7 SEPTEMBER 2012