

# CONTENTS

VOLUME 113 • NUMBER 12

CONTENTS ..... i

FEATURES ..... iv

### PROSPECTS

**Prokaryotic N $\epsilon$ -Lysine Acetylomes and Implications for New Antibiotics**  
*Longxiang Xie, Wu Li, and Jianping Xie* ..... 3601  
ACCEPTED MANUSCRIPT ONLINE 11 JULY 2012

**Dopaminergic Differentiation Using Pluripotent Stem Cells**  
*Olga Momčilović, Justine Montoya-Sack, and Xianmin Zeng* ..... 3610  
ACCEPTED MANUSCRIPT ONLINE 13 JULY 2012

### ARTICLES

**NELL-1 Promotes Cell Adhesion and Differentiation via Integrin $\beta$ 1**  
*Jia Shen, Aaron W. James, Jonguk Chung, Kiho Lee, James B. Zhang, Stephanie Ho, Kevin S. Lee, Toyong M. Kim, Tomoaki Niimi, Shun'ichi Kuroda, Kang Ting, and Chia Soo* ..... 3620  
ACCEPTED MANUSCRIPT ONLINE 13 JULY 2012

**Reversine Promotes Porcine Muscle Derived Stem Cells (PMDSCs) Differentiation Into Female Germ-Like Cells**  
*Xiao Lv, Haijing Zhu, Yaofu Bai, Zhili Chu, Yue Hu, Hui Cao, Chao Liu, Xin He, Sha Peng, Zhimin Gao, Chunrong Yang, and Jinlian Hua* ..... 3629  
ACCEPTED MANUSCRIPT ONLINE 20 JULY 2012

**Quiescence and Attenuated DNA Damage Response Promote Survival of Esophageal Cancer Stem Cells**  
*Yulin Chen, Dan Li, Dapeng Wang, Xuefeng Liu, Ning Yin, Yongmei Song, Shih Hsin Lu, Zhenyu Ju, and Qimin Zhan* ..... 3643  
ACCEPTED MANUSCRIPT ONLINE 18 JUNE 2012

**Aromatic-Turmerone Attenuates Invasion and Expression of MMP-9 and COX-2 Through Inhibition of NF- $\kappa$ B Activation in TPA-Induced Breast Cancer Cells**  
*Sun Young Park, Young Hun Kim, YoungHee Kim, and Sang-Joon Lee* ..... 3653  
ACCEPTED MANUSCRIPT ONLINE 27 JUNE 2012

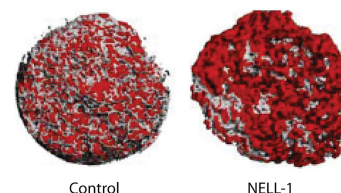
**Association of SIRT1 Expression With Shear Stress Induced Endothelial Progenitor Cell Differentiation**  
*Bin-Bin Cheng, Zhi-Qiang Yan, Qing-Ping Yao, Bao-Rong Shen, Ji-Yao Wang, Li-Zhi Gao, Yu-Qing Li, Hai-Tao Yuan, Ying-Xin Qi, and Zong-Lai Jiang* ..... 3663  
ACCEPTED MANUSCRIPT ONLINE 27 JUNE 2012

**Cover:** Detection of caveolin-1 protein and morphology of fractionated caveolae in human MSCs. Please see article in this issue by Baker et al., pages 3773–3787.

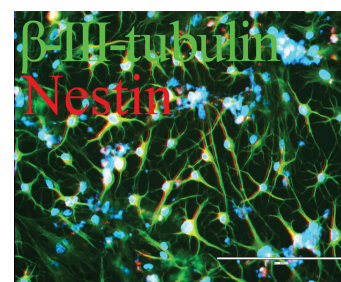
		Acetylation
<i>E. coli</i>	601-S	L P K T R S G K I M R R
<i>M. tuberculosis</i>	599-E	L P K T R S G K I M R R
<i>M. bovis BCG</i>	599-E	L P K T R S G K I M R R
<i>M. smegmatis</i>	599-E	L P R N P T G K I L K R
<i>M. leprae</i>	526-A	L P H T A K G S L D R R

ACS

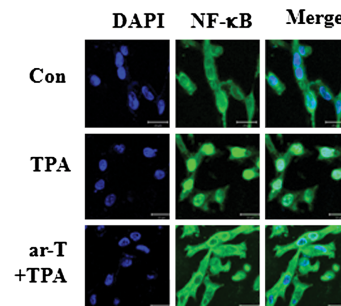
PAGE 3607



PAGE 3627



PAGE 3634



PAGE 3659

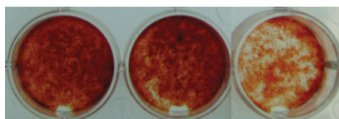


(continued on next page)

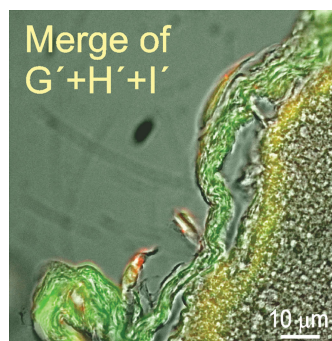
# CONTENTS

C O N T I N U E D

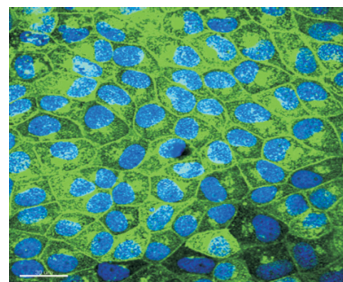
NT Ctrl siRNA siRNA3



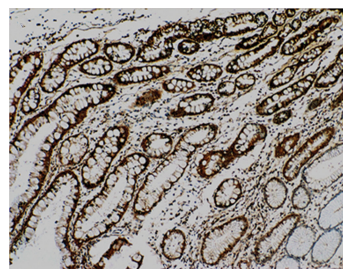
PAGE 3679



PAGE 3717



PAGE 3727



PAGE 3743

- Noggin Suppression Decreases BMP-2-Induced Osteogenesis of Human Bone Marrow-Derived Mesenchymal Stem Cells *In Vitro***  
*Chao Chen, Hasan Uludağ, Zhixiang Wang, and Hongxing Jiang* . . . . . **3672**  
ACCEPTED MANUSCRIPT ONLINE 27 JUNE 2012

- Ultraviolet A Regulates the Stemness of Human Adipose Tissue-Derived Mesenchymal Stem Cells Through Downregulation of the HIF-1 $\alpha$  via Activation of PGE<sub>2</sub>-cAMP Signaling**  
*Jongsung Lee, Eunsun Jung, Jin-Won Hyun, and Deokhoon Park* . . . . . **3681**  
ACCEPTED MANUSCRIPT ONLINE 2 JULY 2012

- CHOP Down-Regulates cFLIP<sub>L</sub> Expression by Promoting Ubiquitin/Proteasome-Mediated cFLIP<sub>L</sub> Degradation**  
*Hyo-Jeong Noh, Sung-Jun Lee, Eon-Gi Sung, In-Hwan Song, Joo-Young Kim, Chang-Hoon Woo, Taeg Kyu Kwon, and Tae-Jin Lee* . . . . . **3692**  
ACCEPTED MANUSCRIPT ONLINE 2 JULY 2012

- Overexpression of *FABP3* Promotes Apoptosis Through Inducing Mitochondrial Impairment in Embryonic Cancer Cells**  
*Gui Xian Song, Ya Hui Shen, Yao Qiu Liu, Wei Sun, Li Ping Miao, Li Juan Zhou, Hai Lang Liu, Rong Yang, Xiang Qing Kong, Ke Jiang Cao, Ling Mei Qian, and Yan Hui Sheng* . . . . . **3701**  
ACCEPTED MANUSCRIPT ONLINE 2 JULY 2012

- $\beta$ -Hexosaminidase From *Xenopus laevis* Eggs and Oocytes: From Gene to Immunochemical Characterization**  
*Enrique S. Morales, Dario Krapf, Pablo E. Botta, Marcelo O. Cabada, and Silvia E. Arranz* . . . . . **3709**  
ACCEPTED MANUSCRIPT ONLINE 2 JULY 2012

- Aquaporin 2-Increased Renal Cell Proliferation Is Associated With Cell Volume Regulation**  
*Gisela Di Giusto, Pilar Flamenco, Valeria Rivarola, Juan Fernández, Luciana Melamud, Paula Ford, and Claudia Capurro* . . . . . **3721**  
ACCEPTED MANUSCRIPT ONLINE 11 JULY 2012

- Reduced Expression of *FASN* Through *SREBP-1* Down-Regulation Is Responsible for Hypoxic Cell Death in HepG2 Cells**  
*Seung-Youn Jung, Hye-Kyung Jeon, Jae-Sun Choi, and Yung-Jin Kim* . . . . . **3730**  
ACCEPTED MANUSCRIPT ONLINE 11 JULY 2012

- H. pylori* Induces the Expression of *Hath1* in Gastric Epithelial Cells Via Interleukin-8/STAT3 Phosphorylation While Suppressing *Hes1***  
*Xin Zhang, Yongtao Yang, Rong Zhu, Jianying Bai, Yin Tian, Xiaohuan Li, Zhihong Peng, Yonghong He, Lei Chen, Dianchun Fang, Wensheng Chen, Quanming Zou, Xuhu Mao, and Rongquan Wang* . . . . . **3740**  
ACCEPTED MANUSCRIPT ONLINE 11 JULY 2012

- Role of Yessotoxin in Calcium and cAMP-Crosstalks in Primary and K-562 Human Lymphocytes: The Effect Is Mediated by Anchor Kinase A Mitochondrial Proteins**  
*Araceli Tobío, Andrea Fernández-Araujo, Amparo Alfonso, and Luis M. Botana* . . . **3752**  
ACCEPTED MANUSCRIPT ONLINE 13 JULY 2012

**Quantitative Proteome Analysis of Ovarian Cancer Tissues Using a iTRAQ Approach**  
*Li-Na Wang, Shi-Wen Tong, Huai-Dong Hu, Feng Ye, Sang-Lin Li, Hong Ren, Da-Zhi Zhang, Rong Xiang, and Yi-Xuan Yang* . . . . . **3762**  
 ACCEPTED MANUSCRIPT ONLINE 13 JULY 2012

**Caveolin-1 Regulates Proliferation and Osteogenic Differentiation of Human Mesenchymal Stem Cells**  
*Natasha Baker, Guofeng Zhang, Yang You, and Rocky S. Tuan* . . . . . **3773**  
 ACCEPTED MANUSCRIPT ONLINE 13 JULY 2012

**Knockdown of Nucleosome Assembly Protein 1-Like 1 Promotes Dimethyl Sulfoxide-Induced Differentiation of P19CL6 Cells Into Cardiomyocytes**  
*Lu Li, Hui Gong, Hongxiu Yu, Xiaohui Liu, Qingping Liu, Guoquan Yan, Yang Zhang, Haojie Lu, Yunzeng Zou, and Pengyuan Yang* . . . . . **3788**  
 ACCEPTED MANUSCRIPT ONLINE 13 JULY 2012

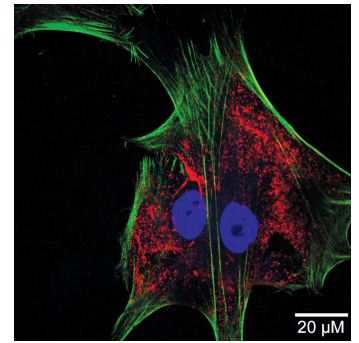
**PTD-hFOXP3 Protein Acts as an Immune Regulator to Convert Human CD4<sup>+</sup>CD25<sup>-</sup> T Cells to Regulatory T-Like Cells**  
*Xia Liu, Xun Xu, Xin Lin, Yuxiang Tian, Baoju Ji, Sheng Xia, Sanrong Xu, Qing Yin, Miaomiao Zhang, Zhijun Jiao, Shengjun Wang, Huaxi Xu, and Qixiang Shao* . . . . . **3797**  
 ACCEPTED MANUSCRIPT ONLINE 13 JULY 2012

**Molecular Mechanism of a Novel CD59-Binding Peptide sp22 Induced Tumor Cells Apoptosis**  
*Bing Li, Mei-Hua Gao, and Xian-Ming Chu* . . . . . **3810**  
 ACCEPTED MANUSCRIPT ONLINE 20 JULY 2012

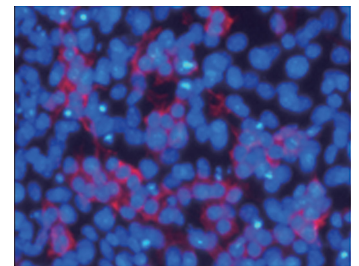
**Type 1 IFN Inhibits the Growth Factor Deprived Apoptosis of Cultured Human Aortic Endothelial Cells and Protects the Cells From Chemically Induced Oxidative Cytotoxicity**  
*Emiko Sano, Shinnya Tashiro, Hisashi Tadakuma, Toshiaki Takei, Takuya Ueda, and Kouhei Tsumoto* . . . . . **3823**  
 ACCEPTED MANUSCRIPT ONLINE 20 JULY 2012

**Analysis of Blastocyst Culture of Discarded Embryos and its Significance for Establishing Human Embryonic Stem Cell Lines**  
*Fang Wang, Hui-Juan Kong, Quan-Cheng Kan, Ju-Yan Liang, Fang Zhao, Ai-Hong Bai, Peng-Fen Li, and Ying-Pu Sun* . . . . . **3835**  
 ACCEPTED MANUSCRIPT ONLINE 20 JULY 2012

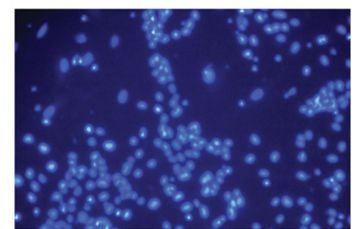
**SAP30L (Sin3A-Associated Protein 30-Like) is Involved in Regulation of Cardiac Development and Hematopoiesis in Zebrafish Embryos**  
*Kaisa J. Teittinen, Toni Grönroos, Matalleena Parikka, Sini Junttila, Annemari Uusimäki, Asta Laiho, Hanna Korkeamäki, Kalle Kurppa, Hannu Turpeinen, Marko Pesu, Attila Gyenesei, Mika Rämetsä, and Olli Lohi* . . . . . **3843**  
 ACCEPTED MANUSCRIPT ONLINE 20 JULY 2012



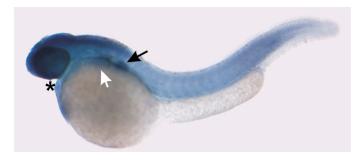
PAGE 3777



PAGE 3791



PAGE 3828



PAGE 3846