

CONTENTS

VOLUME 113 • NUMBER 9

CONTENTSi

FEATURESiv

PROSPECTS

Ric-8: Different Cellular Roles for a Heterotrimeric G-Protein GEF
M.V. Hinrichs, M. Torrejón, M. Montecino, and J. Olate2797

ACCEPTED MANUSCRIPT ONLINE 17 APRIL 2012

Functional Heterogeneity of Mesenchymal Stem Cells: Implications for Cell Therapy
Donald G. Phinney2806

ACCEPTED MANUSCRIPT ONLINE 17 APRIL 2012

Shaping the Nucleus: Factors and Forces
Alison D. Walters, Ananth Bommakanti, and Orna Cohen-Fix2813

ACCEPTED MANUSCRIPT ONLINE 4 MAY 2012

ARTICLES

***Aggregatibacter actinomycetemcomitans* Lipopolysaccharide Regulates Bone Sialoprotein Gene Transcription**
Xinyue Li, Liming Zhou, Hideki Takai, Yoko Sasaki, Masaru Mezawa, Zhengyang Li, Zhitao Wang, Li Yang, Shuang Wang, Hiroyoshi Matsumura, Takashi Kaneko, Atsutoshi Yoshimura, and Yorimasa Ogata2822

ACCEPTED MANUSCRIPT ONLINE 10 APRIL 2012

Sulfuretin From Heartwood of *Rhus verniciflua* Triggers Apoptosis Through Activation of Fas, Caspase-8, and the Mitochondrial Death Pathway in HL-60 Human Leukemia Cells
Kyung-Won Lee, Kyung-Sook Chung, Ji-Hyung Seo, Sung-Vin Yim, Hee-Jun Park, Jung-Hye Choi, and Kyung-Tae Lee2835

ACCEPTED MANUSCRIPT ONLINE 10 APRIL 2012

***N*-(4-Hydroxyphenyl)Retinamide Inhibits Breast Cancer Cell Invasion Through Suppressing NF- κ B Activation and Inhibiting Matrix Metalloproteinase-9 Expression**
Hyereen Kang, Minjae Lee, Kyung-chul Choi, Dong-Myoung Shin, Jesang Ko, and Sung-Wuk Jang2845

ACCEPTED MANUSCRIPT ONLINE 5 APRIL 2012

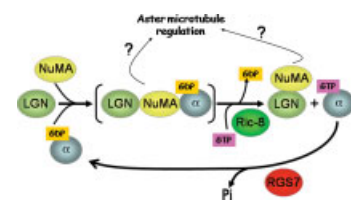
Fibroblast Growth Factor-2 Promotes Catabolism Via FGFR1-Ras-Raf-MEK1/2-ERK1/2 Axis That Coordinates With the PKC δ Pathway in Human Articular Chondrocytes
Dongyao Yan, Di Chen, and Hee-Jeong Im2856

ACCEPTED MANUSCRIPT ONLINE 5 APRIL 2012

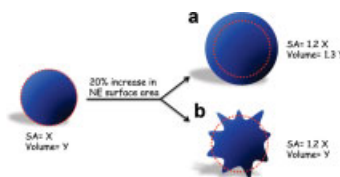
Malabaricone C Inhibits PDGF-Induced Proliferation and Migration of Aortic Smooth Muscle Cells Through Induction of Heme Oxygenase-1
Suhyun Lee, Juhee Seo, Sungwoo Ryoo, To Dao Cuong, Byung-Sun Min, and Jeong-Hyung Lee2866

ACCEPTED MANUSCRIPT ONLINE 17 APRIL 2012

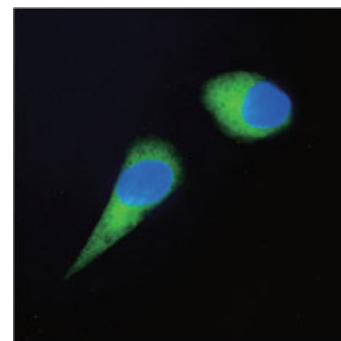
Cover: The nuclear envelope. Please see article by Walters et al., pages 2813–2821, this issue.



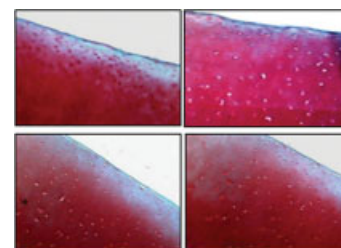
PAGE 2800



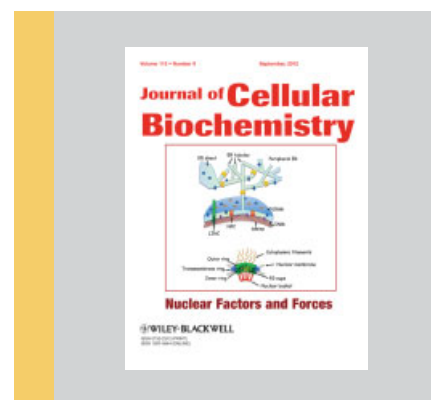
PAGE 2818



PAGE 2853

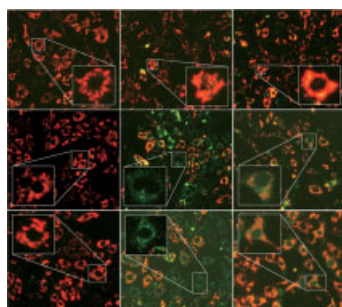


PAGE 2863

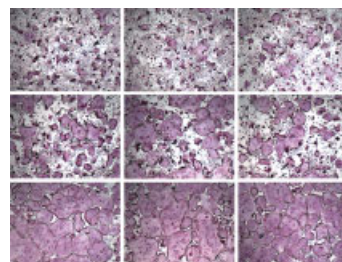


CONTENTS

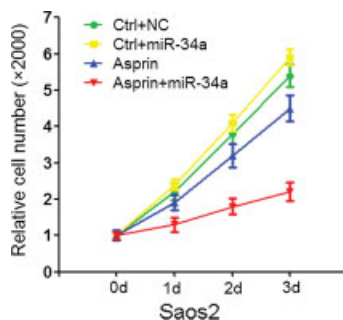
C O N T I N U E D



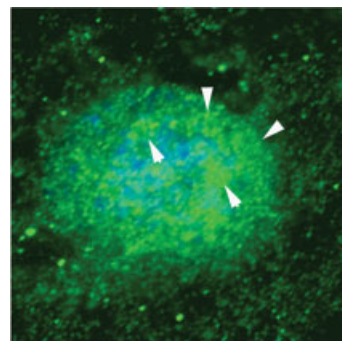
PAGE 2888



PAGE 2898



PAGE 2907



PAGE 2923

Antithrombotic and Profibrinolytic Activities of Eckol and Dieckol

Tae Hoon Kim, Sae-Kwang Ku, and Jong-Sup Bae2877
ACCEPTED MANUSCRIPT ONLINE 17 APRIL 2012

Junctophilin 2 Knockdown Interfere With Mitochondrium Status in ESC-CMs and Cardiogenesis of ES Cells

Xingguang Liang, Yuqin Mei, Xin Huang, Guofang Shen, Danyan Zhu, Yongping Yu, Jianan Wang, and Yijia Lou2884
ACCEPTED MANUSCRIPT ONLINE 17 APRIL 2012

IL-17 Mediates Estrogen-Deficient Osteoporosis in an Act1-Dependent Manner

Carl J. DeSelm, Yoshifumi Takahata, Julia Warren, Jean C. Chappel, Taimur Khan, Xiaoxia Li, Caini Liu, Yongwon Choi, Youngmi Faith Kim, Wei Zou, and Steven L. Teitelbaum2895
ACCEPTED MANUSCRIPT ONLINE 17 APRIL 2012

Restoration of miR-34a in p53 Deficient Cells Unexpectedly Promotes the Cell Survival by Increasing NFκB Activity

Jiali Tan, Li Fan, Jeremy J. Mao, Bin Chen, Liwei Zheng, Tao Zhang, Tong Li, Jianmin Duan, Yinzhong Duan, Zuolin Jin, and Wei Kuang2903
ACCEPTED MANUSCRIPT ONLINE 24 APRIL 2012

Coordinate Lentiviral Expression of Cre Recombinase and RFP/EGFP Mediated by FMDV 2A and Analysis of Cre Activity

Kuancan Liu, Heng Wang, Ying Long, Jun Ye, and Li Yuan2909
ACCEPTED MANUSCRIPT ONLINE 24 APRIL 2012

A Novel Nuclear FGF Receptor-1 Partnership With Retinoid and Nur Receptors During Developmental Gene Programming of Embryonic Stem Cells

Yu-Wei Lee, Christopher Terranova, Barbara Birkaya, Sridhar Narla, Daniel Kehoe, Abhirath Parikh, Shuo Dong, Andreas Ratzka, Hella Brinkmann, John M. Aletta, Emmanuel S. Tzanakakis, Ewa K. Stachowiak, Peter Claus, and Michal K. Stachowiak2920
ACCEPTED MANUSCRIPT ONLINE 26 APRIL 2012

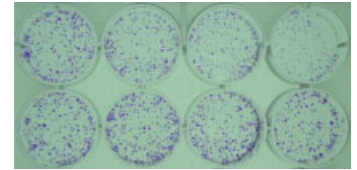
Inhibition of Butyrate Uptake by the Primary Bile Salt Chenodeoxycholic Acid in Intestinal Epithelial Cells

Pedro Gonçalves, Telmo Catarino, Inês Gregório, and Fátima Martel2937
ACCEPTED MANUSCRIPT ONLINE 2 MAY 2012

Cell Rounding in Cultured Human Astrocytes and Vascular Endothelial Cells Upon Inhibition of CK2 Is Mediated by Actomyosin Cytoskeleton Alterations

A.A. Kramerov, K. Ahmed, and A.V. Ljubimov2948
ACCEPTED MANUSCRIPT ONLINE 2 MAY 2012

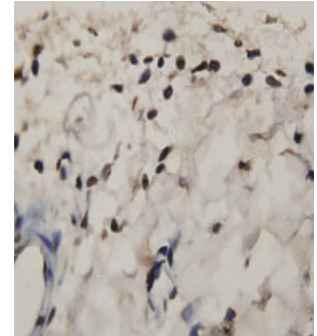
N-Glycan Biosynthesis Inhibitors Induce In Vitro Anticancer Activity in Colorectal Cancer Cells
Julio Cesar Madureira de-Freitas-Junior, Lilian Golçaves Bastos, Carlos Alberto Freire-Neto, Bárbara Du Rocher, Eliana Saul Furquim Werneck Abdelhay, and José Andrés Morgado-Díaz **2957**
 ACCEPTED MANUSCRIPT ONLINE 2 MAY 2012



PAGE 2862

MmNEU3 Sialidase Over-Expression in C2C12 Myoblasts Delays Differentiation and Induces Hypertrophic Myotube Formation
Nadia Papini, Luigi Anastasia, Cristina Tringali, Loredana Dileo, Ivan Carubelli, Maurilio Sampaolesi, Eugenio Monti, Guido Tettamanti, and Bruno Venerando. **2967**
 ACCEPTED MANUSCRIPT ONLINE 2 MAY 2012

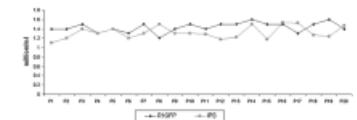
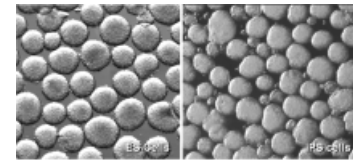
Network Analysis of *icb-1* Gene Function in Human Breast Cancer Cells
Oliver Treeck, Derya Belgutay, Julia Häring, Susanne Schöler, Claus Lattrich, and Olaf Ortmann **2979**
 ACCEPTED MANUSCRIPT ONLINE 4 MAY 2012



PAGE 2999

Antagonist of microRNA-21 Improves Balloon Injury-Induced Rat Iliac Artery Remodeling by Regulating Proliferation and Apoptosis of Adventitial Fibroblasts and Myofibroblasts
Fei Wang, Xue-Qiang Zhao, Jun-Ni Liu, Zhi-Hao Wang, Xiu-Ling Wang, Xiao-Yang Hou, Rong Liu, Fei Gao, Ming-Xiang Zhang, Yun Zhang, and Pei-Li Bu **2989**
 ACCEPTED MANUSCRIPT ONLINE 4 MAY 2012

Maintenance of Feeder Free Anchorage Independent Cultures of ES and iPS Cells by Retinol/Vitamin A
Himanshu Bhatia, Rohit Sharma, Joyce Dawes, and Jaspal S. Khillan **3002**
 ACCEPTED MANUSCRIPT ONLINE 4 MAY 2012

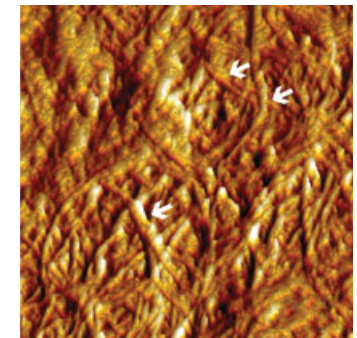


PAGE 3005

Cysteine-Rich Protein 61 (CCN1) Mediates Replicative Senescence-Associated Aberrant Collagen Homeostasis in Human Skin Fibroblasts
Taihao Quan, Zhaoping Qin, John J. Voorhees, and Gary J. Fisher **3011**
 ACCEPTED MANUSCRIPT ONLINE 4 MAY 2012

Mps One Binder 2 Gene Upregulation in the Stellation of Astrocytes Induced by cAMP-Dependent Pathway
Kuan-Min Fang, Yi-Ying Liu, Cheng-Han Lin, Seng-Sheen Fan, Chung-Hua Tsai, and Shun-Fen Tzeng **3019**
 ACCEPTED MANUSCRIPT ONLINE 4 MAY 2012

Peptide-Based Activation of Alpha5 Integrin for Promoting Osteogenesis
Olivia Fromigué, Julia Brun, Caroline Marty, Sophie Da Nascimento, Pascal Sonnet, and Pierre J. Marie **3029**
 ACCEPTED MANUSCRIPT ONLINE 4 MAY 2012



PAGE 3015

Scaffold Attachment Factor B (SAFB)1 and SAFB2 Cooperatively Inhibit the Intranuclear Mobility and Function of ER α
Takashi Hashimoto, Ken-Ichi Matsuda, and Mitsuhiro Kawata **3039**
 ACCEPTED MANUSCRIPT ONLINE 4 MAY 2012