

# CONTENTS

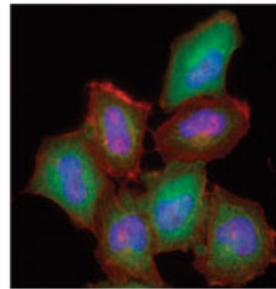
Journal of **Cellular  
Biochemistry**

VOLUME 112 • NUMBER 9

<b>CONTENTS .....</b>	i
<b>FEATURES .....</b>	vii
<b>LETTER TO THE EDITOR</b>	

<b>The Unsaturated Brain: An Evolutionary Compromise?</b> <i>David Costantini and Valeria Marasco</i> .....	2201
--	------

PUBLISHED ONLINE 18 APRIL 2011

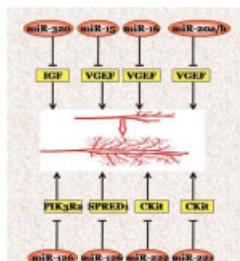


PAGE 2205

## PROSPECTS

<b>SHIP2 Multiple Functions: A Balance Between a Negative Control of PtdIns(3,4,5)P<sub>3</sub> Level, a Positive Control of PtdIns(3,4)P<sub>2</sub> Production, and Intrinsic Docking Properties</b>
<i>Christophe Erneux, William's Elong Edimo, Laurence Deneubourg, and Isabelle Pirson</i> .....

2203
PUBLISHED ONLINE 18 APRIL 2011



PAGE 2213

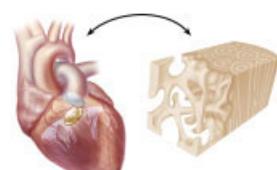
<b>Comprehensive Patterns in MicroRNA Regulation of Transcription Factors During Tumor Metastasis</b>
<i>G. Reshma, Charles Sona, and M. Radhakrishna Pillai</i> .....

2210
PUBLISHED ONLINE 18 APRIL 2011

<b>Chromatin Interaction Networks and Higher Order Architectures of Eukaryotic Genomes</b>
<i>Kuljeet Singh Sandhu, Guoliang Li, Wing-Kin Sung, and Yijun Ruan</i> .....

2218
------

PUBLISHED ONLINE 25 APRIL 2011



PAGE 2227

<b>The Role of Lrp5/6 in Cardiac Valve Disease: LDL-Density-Pressure Theory</b>
<i>Nalini M. Rajamannan</i> .....

2222
------

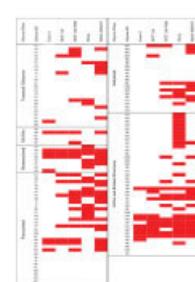
PUBLISHED ONLINE 16 MAY 2011

## ARTICLES

<b>Differential Carbohydrate Binding and Cell Surface Glycosylation of Human Cancer Cell Lines</b>
--

<i>Nadia X. Arndt, Joe Tirilongo, Paul D. Madge, Mark von Itzstein, and Christopher J. Day</i> .....
--

PUBLISHED ONLINE 7 APRIL 2011



PAGE 2235

<b>Transcriptional and Post-Transcriptional Down-Regulation of Cyclin D1 Contributes to C6 Glioma Cell Differentiation Induced by Forskolin</b>
---

<i>Songmin He, Wenbo Zhu, Yuxi Zhou, Yijun Huang, Yanqiu Ou, Yan Li, and Guangmei Yan</i> .....
---

2241
------

PUBLISHED ONLINE 7 APRIL 2011

<b>ER-Resident Gi<sub>2</sub> Protein Controls Sar1 Translocation onto the ER During Budding of Transport Vesicles</b>
--

<i>Hiroshi Nakagawa, Haruka Umadome, Shuichi Miyazaki, Katsuhiro Tanaka, Kazuhiko Nishimura, Masayuki Komori, and Saburo Matsuo</i> .....
---

PUBLISHED ONLINE 7 APRIL 2011

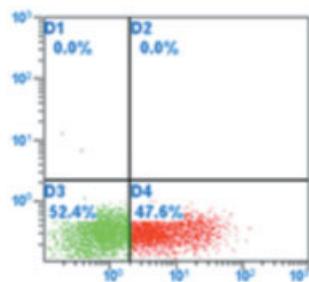
**Cover:** The cover shows the localization of Uhrf2-GFP (green) at heterochromatic chromocenters in mouse embryonic fibroblasts counterstained with DAPI (blue) and immunostained for H3K9me3 (red). See article in this issue by Pichler et al, pages 2585–2593.

(continued on next page)



i

# CONTENTS CONTINUED



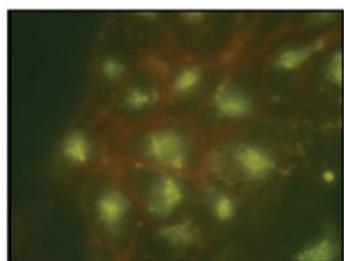
PAGE 2261

## P2Y11 Impairs Cell Proliferation by Induction of Cell Cycle Arrest and Sensitizes Endothelial Cells to Cisplatin-Induced Cell Death

Zhilin Xiao, Mei Yang, Qingshan Lv, Wenmeng Wang, Minjie Deng, Xuetong Liu, Qing He, Xiaobin Chen, Meifang Chen, Li Fang, Xiumei Xie, and Jinyue Hu . . . . . 2257  
PUBLISHED ONLINE 18 APRIL 2011

## Isolation and Characterization of Squamous Carcinoma Cells Resistant to Photodynamic Therapy

Laura N. Milla, Ingrid S. Cogno, Matías E. Rodríguez, Francisco Sanz-Rodríguez, Alicia Zamarrón, Yolanda Gilaberte, Elisa Carrasco, Viviana A. Rivarola and Ángeles Juarranz . . . . . 2266  
PUBLISHED ONLINE 18 APRIL 2011



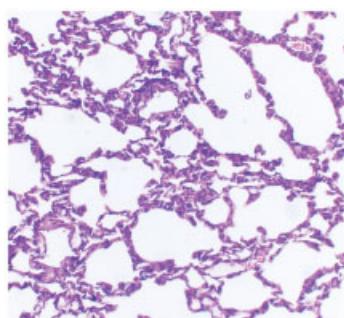
PAGE 2271

## Ubiquitination and Downregulation of ErbB2 and Estrogen Receptor-Alpha by Kinase Inhibitor MP-412 in Human Breast Cancer Cells

Tsuyoshi Suzuki, Akihiro Fujii, Hiroshi Ochi, and Hideo Nakamura . . . . . 2279  
PUBLISHED ONLINE 18 APRIL 2011

## The Role of TWIST as a Regulator in Giant Cell Tumor of Bone

Shalini Singh, Isabella W.Y. Mak, Robert W. Cowan, Robert Turcotte, Gurmit Singh, and Michelle Ghert . . . . . 2287  
PUBLISHED ONLINE 18 APRIL 2011



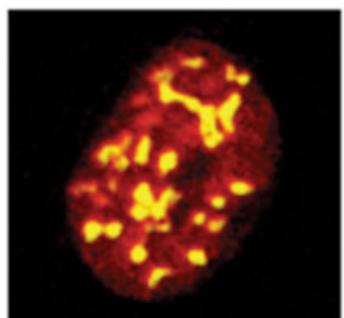
PAGE 2310

## Over-Expression of FoxM1 Leads to Epithelial–Mesenchymal Transition and Cancer Stem Cell Phenotype in Pancreatic Cancer Cells

Bin Bao, Zhiwei Wang, Shadan Ali, Dejuan Kong, Sanjeev Banerjee, Aamir Ahmad, Yiwei Li, Asfar S. Azmi, Lucio Miele, and Fazlul H. Sarkar . . . . . 2296  
PUBLISHED ONLINE 18 APRIL 2011

## Cigarette Smoke-Induced Skeletal Muscle Atrophy is Associated with Up-Regulation of USP-19 via p38 and ERK MAPKs

Qian Liu, Wei-Guo Xu, Yong Luo, Feng-Feng Han, Xiao-Hong Yao, Tian-Yun Yang, Yue Zhang, Wei-Feng Pi, and Xue-Jun Guo . . . . . 2307  
PUBLISHED ONLINE 18 APRIL 2011



PAGE 2324

## TCERG1 Inhibits C/EBP $\alpha$ Through a Mechanism That Does Not Involve Sequestration of C/EBP $\alpha$ at Pericentromeric Heterochromatin

Banafsheh Moazed, Shanna L. Banman, Grey A. Wilkinson, and William J. Roesler . . . . . 2317  
PUBLISHED ONLINE 18 APRIL 2011

## Combined Supplementation of Vanadium and Fish Oil Suppresses Tumor Growth, Cell Proliferation and Induces Apoptosis in DMBA-Induced Rat Mammary Carcinogenesis

Sangita Manna, Subhadeep Das, Mary Chatterjee, M. Janarthan, and Malay Chatterjee . . . . . 2327  
PUBLISHED ONLINE 18 APRIL 2011

# CONTENTS CONTINUED

**Down Regulation of CSL Activity Inhibits Cell Proliferation in Prostate and Breast Cancer Cells**

*Thomas Yong, Amanda Sun, Michael D. Henry, Shari Meyers, and J. Nathan Davis . . . . .* **2340**

PUBLISHED ONLINE 25 APRIL 2011

**Fisetin Induces Nrf2-Mediated HO-1 Expression Through PKC- $\delta$  and p38 in Human Umbilical Vein Endothelial Cells**

*Seung Eun Lee, Seong Il Jeong, Hana Yang, Cheung-Seog Park, Young-Ho Jin, and Yong Seek Park . . . . .* **2352**

PUBLISHED ONLINE 25 APRIL 2011

**$\beta$ -Globin Matrix Attachment Region Improves Stable Genomic Expression of the *Sleeping Beauty* Transposon**

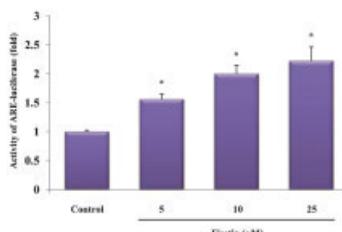
*Lucas Sjeklocha, Yixin Chen, Meghan C. Daly, Clifford J. Steer, and Betsy T. Kren . . . . .* **2361**

PUBLISHED ONLINE 25 APRIL 2011

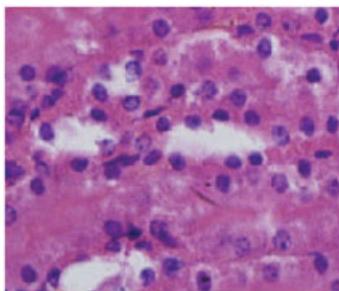
**Amelioration of Systemic Lupus Erythematosus by Withanolatin A in MRL/lpr Mice**

*Lijuan Sun, Lin Zhou, Mingcang Chen, Renqian Zhong, and Jianwen Liu . . . . .* **2376**

PUBLISHED ONLINE 25 APRIL 2011



PAGE 2358

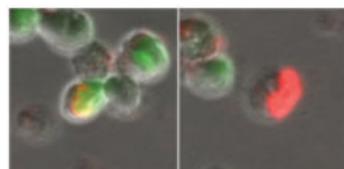


PAGE 2379

**Fanconi Anemia D2 Protein Is an Apoptotic Target Mediated by Caspases**

*Su-Jung Park, Brian D. Beck, M. Reza Saadatzadeh, Laura S. Haneline, D. Wade Clapp, and Suk-Hee Lee . . . . .* **2383**

PUBLISHED ONLINE 25 APRIL 2011

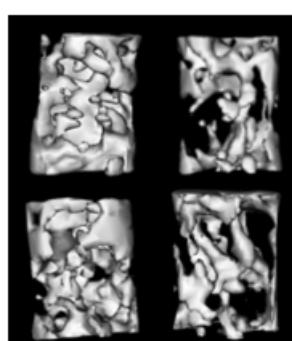


PAGE 2395

**Axin1 Expression Facilitates Cell Death Induced by Aurora Kinase Inhibition Through PARP Activation**

*Eun-Jin Choi, Shi-Mun Kim, Ki-Joon Song, Jae-Myun Lee, and Sun-Ho Kee. . . . .* **2392**

PUBLISHED ONLINE 25 APRIL 2011



PAGE 2406

**Caspase-2 Deficiency Protects Mice From Diabetes-Induced Marrow Adiposity**

*Lindsay M. Coe, Dennean Lippner, Gloria I. Perez, and Laura R. McCabe . . . . .* **2403**

PUBLISHED ONLINE 25 APRIL 2011

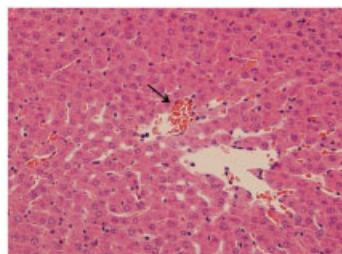
**Apoptotic Osteocytes Regulate Osteoclast Precursor Recruitment and Differentiation In Vitro**

*Saja A. Al-Dujaili, Esther Lau, Hashem Al-Dujaili, Kyle Tsang, Axel Guenther, and Lidan You . . . . .* **2412**

PUBLISHED ONLINE 2 MAY 2011

(continued on next page)

# CONTENTS CONTINUED



PAGE 2438

## Analgesic-Antitumor Peptide Inhibits Proliferation and Migration of SHG-44 Human Malignant Glioma Cells

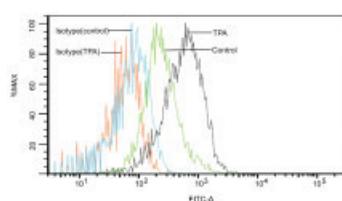
Youlong Zhao, Xuetong Cai, Tingmei Ye, Jiege Huo, Chao Liu, Shuangquan Zhang, and Peng Cao ..... 2424

PUBLISHED ONLINE 2 MAY 2011

## Altered Expression Levels of miRNAs in Serum as Sensitive Biomarkers for Early Diagnosis of Traumatic Injury

Yi Zhang, Yonghui Liao, Desheng Wang, Yong He, Dayong Cao, Fuqin Zhang, and Kefeng Dou ..... 2435

PUBLISHED ONLINE 2 MAY 2011



PAGE 2445

## Microarray Profiling of Monocytic Differentiation Reveals miRNA-mRNA Intrinsic Correlation

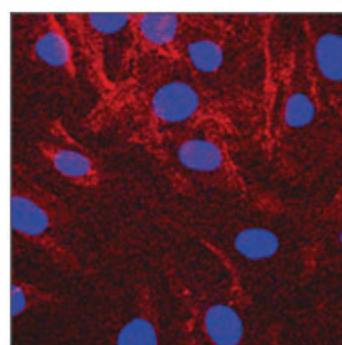
Jing Wang, Guangxing Xiang, Keith Mitchelson, and Yuxiang Zhou ..... 2443

PUBLISHED ONLINE 2 MAY 2011

## Matrix Metalloproteinase-1 Induces Cleavage of Exogenous AlphaB-Crystallin Transduced by a Cell-Penetrating Peptide

Seung Won Yang, Seung-Min Lee, Eun Young Choi, Kyung Hye Lee, Soo Hyuk Kim, Min-Jeong Shin, Ye Sun Han, Seok-Min Kang, and Ji Hyung Chung ..... 2454

PUBLISHED ONLINE 2 MAY 2011



PAGE 2457

## Evidence That the Kinase-Truncated c-Src Regulates NF-κB Signaling by Targeting NEMO

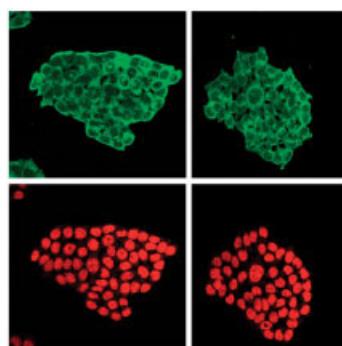
S. Dai, W. Abu-Amer, K. Karuppaiah, and Y. Abu-Amer ..... 2463

PUBLISHED ONLINE 2 MAY 2011

## Induction of Autophagy by Dimethyl Cardamonin Is Associated With Proliferative Arrest in Human Colorectal Carcinoma HCT116 and LOVO Cells

Hyeonseok Ko, Young-Joo Kim, Evangeline C. Amor, Jong Wha Lee, Han-Cheon Kim, Hee Ju Kim, and Hyun Ok Yang ..... 2471

PUBLISHED ONLINE 2 MAY 2011



PAGE 2497

## Impact of HMG-CoA Reductase Inhibition on Oxidant-Induced Injury in Human Retinal Pigment Epithelium Cells

Jinqiao Qian, Kyle T. Keyes, Bo Long, Guanglin Chen, and Yumei Ye ..... 2480

PUBLISHED ONLINE 4 MAY 2011

## 15-Lipoxygenase-1 Exerts Its Tumor Suppressive Role by Inhibiting Nuclear Factor-Kappa B Via Activation of PPAR Gamma

I. Cimen, E. Astarci, and S. Banerjee ..... 2490

PUBLISHED ONLINE 4 MAY 2011

# CONTENTS CONTINUED

- Inhibitory Effect of Thrombin on the Expression of Secretory Group IIA Phospholipase A<sub>2</sub>**  
*Jong-Sup Bae* ..... 2502  
 PUBLISHED ONLINE 4 MAY 2011

- Activation of EGFR Promotes Squamous Carcinoma SCC10A Cell Migration and Invasion Via Inducing EMT-Like Phenotype Change and MMP-9-Mediated Degradation of E-Cadherin**  
*Jian-Hong Zuo, Wei Zhu, Mao-Yu Li, Xin-Hui Li, Hong Yi, Gu-Qing Zeng, Xun-Xun Wan, Qiu-Yan He, Jian-Huang Li, Jia-Quan Qu, Yu Chen, and Zhi-Qiang Xiao* ..... 2508  
 PUBLISHED ONLINE 6 MAY 2011

- Alteration of Integrin-Dependent Adhesion and Signaling in EMT-Like MDCK Cells Established Through Overexpression of Calreticulin**  
*Yoshito Ihara, Yoko Inai, and Midori Ikezaki* ..... 2518  
 PUBLISHED ONLINE 6 MAY 2011

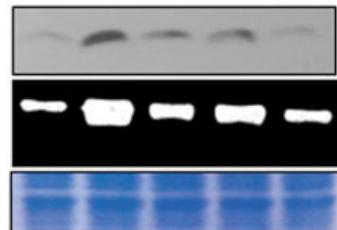
- The Relationship Between Calcium and the Metabolism of Plasma Membrane Phospholipids in Hemolysis Induced by Brown Spider Venom Phospholipase-D Toxin**  
*Daniele Chaves-Moreira, Fernanda N. Souza, Rosalvo T.H. Fogaça, Oldemir C. Mangili, Waldemiro Gremski, Andrea Senff-Ribeiro, Olga M. Chaim, and Silvio S. Veiga* ..... 2529  
 PUBLISHED ONLINE 16 MAY 2011

- Mediation of Rac1 Activation by Kindlin-2: An Essential Function in Osteoblast Adhesion, Spreading, and Proliferation**  
*Gil-Yong Jung, Yoon-Jeong Park, and Jung-Suk Han* ..... 2541  
 PUBLISHED ONLINE 16 MAY 2011

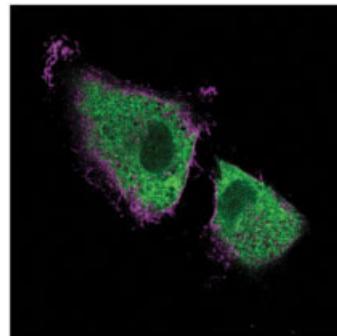
- IL-8 Increases Integrin Expression and Cell Motility in Human Chondrosarcoma Cells**  
*Chun-Yi Lee, Chun-Yin Huang, Meng-Yi Chen, Ching-Yuang Lin, Horng-Chaung Hsu, and Chih-Hsin Tang* ..... 2549  
 PUBLISHED ONLINE 16 MAY 2011

- BMP-2 Suppresses Renal Interstitial Fibrosis by Regulating Epithelial–Mesenchymal Transition**  
*Yu-Lin Yang, Hong-Zen Ju, Shu-Fen Liu, Tao-Chen Lee, Yuan-Wei Shih, Lea-Yea Chuang, Jinn-Yuh Guh, Ya-Ying Yang, Tung-Nan Liao, Tsung-Jen Hung, and Min-Yuan Hung* ..... 2558  
 PUBLISHED ONLINE 16 MAY 2011

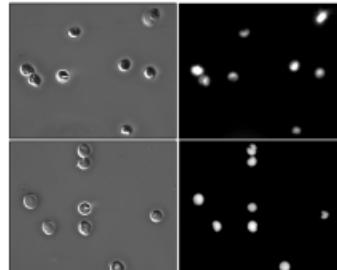
- Alkaline Stress-Induced Autophagy is Mediated by mTORC1 Inactivation**  
*Jinkyu Suk, Sang Su Kwak, Jae Ho Lee, Ji Hye Choi, Sang-Hee Lee, Dong Hwan Lee, Boohyeong Byun, Geon-Hyoung Lee, and Cheol O. Joe* ..... 2566  
 PUBLISHED ONLINE 16 MAY 2011



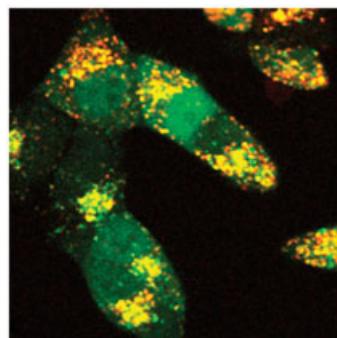
PAGE 2515



PAGE 2523



PAGE 2536



PAGE 2569

(continued on next page)

# CONTENTS

The figure displays two Western blot panels. The top panel shows results for EBP50 siRNA (1), and the bottom panel shows results for EBP50 siRNA (2). Each panel has six lanes corresponding to different treatments. The first four lanes represent increasing concentrations of scramble siRNA (0, 10, 20, and 30 nM), while the last two lanes represent increasing concentrations of EBP50 siRNA (0 and 30 nM). The blots are probed with antibodies against EBP50 (green) and Actin (red). In both panels, Actin serves as a loading control. In the EBP50 siRNA (1) panel, EBP50 bands are visible in the first four lanes (scramble siRNA) but absent in the last two lanes (EBP50 siRNA). In the EBP50 siRNA (2) panel, EBP50 bands are visible in the first four lanes (scramble siRNA) but absent in the last two lanes (EBP50 siRNA).

PAGE 2577

## **EBP50 Is Involved in the Regulation of Vascular Smooth Muscle Cell Migration and Cytokinesis**

Nicolas Baeyens, Carole de Meester, Xavier Yerna, and Nicole Morel. . . . . . 2574

PUBLISHED ONLINE 19 MAY 2011

## Cooperative DNA and Histone Binding by Uhrf2 Links the Two Major Repressive Epigenetic Pathways

*Garwin Pichler, Patricia Wolf, Christine S. Schmidt, Daniela Meilinger,  
Katrín Schneider, Carina Frauer, Karin Fellinger, Andrea Rottach, and  
Heinrich Leonhardt* . . . . . 2585

PUBLISHED ONLINE 19 MAY 2011

PAGE 2599

## Complement C3a and C5a Modulate Osteoclast Formation and Inflammatory Response of Osteoblasts in Synergism With IL-1 $\beta$

Anita Ignatius, Philipp Schoengraf, Ludwika Kreja, Astrid Liedert,  
Stefan Recknagel, Sebastian Kandert, Rolf E. Brenner, Marion Schneider,  
John D. Lambris, and Markus Huber-Lang ..... 2594

PUBLISHED ONLINE 19 MAY 2011

## Tumor Necrosis Factor- $\alpha$ Treatment of HepG2 Cells Mobilizes a Cytoplasmic Pool of ERp57/1,25D3-MARRS to the Nucleus

Brian J. Grindel, Benjamin Rohe, Susan E. Safford, Joseph J. Bennett, and Mary C. Farach-Carson . . . . . 2606

PUBLISHED ONLINE 19 MAY 2011

A micrograph showing a complex, swirling pattern of green and red fluorescence against a dark background. The green signal appears as bright, irregular patches and streaks, while the red signal shows more distinct, elongated structures. The overall texture is organic and cellular.

PAGE 2611

## **Apolipoprotein A-I Mimetic Peptide L-4F Prevents Myocardial and Coronary Dysfunction in Diabetic Mice**

C. Vecoli, J. Cao, D. Neglia, K. Inoue, K. Sodhi, L. Vanella, K.K. Gabrielson,  
D. Bedja, N. Paolocci, A. L'Abbate, and N.G. Abraham . . . . . 2616

PUBLISHED ONLINE 19 MAY 2011

## **Effects of Nonylphenol on the Production of Progesterone on the Rats Granulosa Cells**

PUBLISHED ONLINE 19 MAY 2011

## C-Kit Mutations and PKC Crosstalks: PKC Translocates to Nucleus Only in Cells HMC<sup>560,816</sup>

PUBLISHED ONLINE 19 MAY 2011

PUBLISHED ONLINE 19 MAY 2011