Contents

Highlights of This Issue 809

PERSPECTIVE

811  On the Regulation and Activation of JAK2: A Novel Hypothetical Model
Tai-Sung Lee

REVIEW

815  The Changing Mutational Landscape of Acute Myeloid Leukemia and Myelodysplastic Syndrome
Connie A. Larsson, Gilbert Cote, and Alfonso Quintás-Cardama

828  ARF Regulates the Stability of p16 Protein Via REGγ-Dependent proteasome Degradation
Takashi Kobayashi, Jingqiang Wang, Hikmat Al-Ahmadie, and Cory Abate-Shen

CELL CYCLE AND SENESCENCE

834  FoxM1 is Overexpressed in Helicobacter pylori–Induced Gastric Carcinogenesis and Is Negatively Regulated by miR-370
Yimin Feng, Lixiang Wang, Jiping Zeng, Li Shen, Xiuming Liang, Han Yu, Shili Liu, Zhifang Liu, Yundong Sun, Wenjuan Li, Chunyan Chen, and Jiuhui Jia

845  Suppression of Ser/Thr Phosphatase 4 (PP4C/PPP4C) Mimics a Novel Post-Mitotic Action of Fostriein, Producing Mitotic Slippage Followed by Tetraploid Cell Death
Benjamin Theobald, Kathy Bonness, Alla Musiienko, Joel F. Andrews, Gudrun Urban, Xizhong Huang, Nicholas M. Dean, and Richard E. Honkanen

CELL DEATH AND SURVIVAL

856  Development of a Novel Class of Tubulin Inhibitors with Promising Anticancer Activities
Jingle Xi, Xuejun Zhu, Yongmei Feng, Na Huang, Guifen Luo, Yongjun Mao, Xiaofeng Han, Wang Tian, Guirong Wang, Xiaobing Han, Rongcheng Luo, Ziwei Huang, and Jing An

TROY (TNFRSF19) Promotes Glioblastoma Survival Signaling and Therapeutic Resistance
Joseph C. Loftus, Harshil Dhruv, Serdar Tuncali, Jean Kloss, Zhongbo Yang, Cassie A. Schumacher, Brian Cao, Bart O. Williams, Jennifer M. Eschbacher, Julianna T.D. Ross, and Nhan L. Tran

CHROMATIN, GENE, AND RNA REGULATION

875  Transcription Factor Interactions Mediate EGF-Dependent COX-2 Expression
Kaiming Xu and Hui-Kuo G. Shu

887  Dysregulating IRES-Dependent Translation Contributes to Overexpression of Oncogenic Aurora A Kinase
Tara Dobson, Juan Chen, and Les A. Krushel

DNA DAMAGE AND REPAIR

901  Mitoxantrone Targets Human Ubiquitin-Specific Peptidase 11 (USP11) and Is a Potent Inhibitor of Pancreatic Cancer Survival
miR-150 Blocks MLL-AF9–Associated Leukemia through Oncogene Repression
Marina Bousquet, Guoqing Zhuang, Cong Meng, Wei Ying, Patali S. Cheruku, Andrew T. Shie, Stephanie Wang, Guangtao Ge, Piu Wong, Gang Wang, Stephen Safe, and Beiyan Zhou

miR-155–Deficient Bone Marrow Promotes Tumor Metastasis
Fang Yu, Xuemei Jia, Fen Du, Junfeng Wang, Yuzhen Wang, Walden Ai, and Daping Fan

RASEF is a Novel Diagnostic Biomarker and a Therapeutic Target for Lung Cancer
Hideto Oshita, Ryohei Nishino, Atsushi Takano, Takashi Fujitomo, Masato Aragaki, Tatsuya Kato, Hirohiko Akiyama, Eiju Tsuchiya, Nobuoki Kohno, Yusuke Nakamura, and Yataro Daigo

Correction: Targeting Tumor Cell Invasion and Dissemination In Vivo by an Aptamer that Inhibits Urokinase-Type Plasminogen Activator through a Novel Multifunctional Mechanism

About the Cover
The inaugural Rapid Impact article, by Kobayashi and colleagues (beginning on page 828), reveals a crosstalk between two dominant cell cycle tumor suppressor proteins such that p14ARF regulates the stability of p16INK4A through a degradation mechanism involving the REGγ subunit of the 20S proteasome. Accompanying the article online, and presented on the cover, the AACR and Molecular Cancer Research are proud to introduce a new article feature called Visual Overview in which the novel findings of the article are graphically depicted.