Highlights of This Issue 1049

REVIEWS

1051 Attacking a Nexus of the Oncogenic Circuitry by Reversing Aberrant eIF4F-Mediated Translation
Peter B. Bitterman and Vitaly A. Polunovsky

1062 Immunotherapy of Cancer with 4-1BB
Dass S. Vinay and Byoung S. Kwon

THERAPEUTIC DISCOVERY

1071 Quantitative Proteomic Profiling Identifies Protein Correlates to EGFR Kinase Inhibition

1082 Hyperactivation of 4E-Binding Protein 1 as a Mediator of Biguanide-Induced Cytotoxicity during Glucose Deprivation
Junichi Matsuo, Yoshinori Tsukumo, Sakae Saito, Satomi Tsukahara, Junko Sakurai, Shigeo Sato, Hiromichi Kondo, Masaru Ushijima, Masaaki Matsuura, Toshiki Watanabe, and Akihiro Tomida

1092 Off-Target Function of the Sonic Hedgehog Inhibitor Cyclopamine in Mediating Apoptosis via Nitric Oxide-Dependent Neutral Sphingomyelinase 2/Ceramide Induction

PRECLINICAL DEVELOPMENT

1103 Evading Pgp Activity in Drug-Resistant Cancer Cells: A Structural and Functional Study of Antitubulin Furan Metotica Compounds
Tam Luong Nguyen, Maria Rosaria Cera, Andrea Pinto, Leonardo Lo Presti, Ernest Hamel, Paola Conti, Rick Gussio, and Peter DeWulf

1112 JAK–STAT and JAK–PI3K–mTORC1 Pathways Regulate Telomerase Transcriptionally and Posttranslationally in ATL Cells
Osamu Yamada, Kohji Ozaki, Masaharu Akiyama, and Kiyotaka Kawauchi

1122 Obatoclax Interacts Synergistically with the Irreversible Proteasome Inhibitor Carfilzomib in GC- and ABC-DLBCL Cells In Vitro and In Vivo
Girija Dasmahapatra, Dmitry Lemerskly, Minkyoeong P. Son, Hiral Patel, Derick Peterson, Elisa Attiksson, Richard I. Fisher, Jonathan W. Friedberg, Paul Dent, and Steven Grant

1133 The Effect of Different Linkers on Target Cell Catabolism and Pharmacokinetics/Pharmacodynamics of Trastuzumab Maytansinoid Conjugates

1143 ERK Inhibition Overcomes Acquired Resistance to MEK Inhibitors
Georgia Hatzivassilou, Bonnie Liu, Carol O’Brien, Jill M. Spoerke, Klaus P. Hoeflich, Peter M. Haverty, Robert Soriano, William F. Forrest, Sherry Heldens, Huiwen Chen, Karen Toy, Connie Ha, Wei Zhou, Kyung Song, Lori S. Friedman, Lukas C. Amler, Garret M. Hampton, John Mollfat, Marcia Belvin, and Mark R. Lackner

1155 Triggering Fbw7-Mediated Proteasomal Degradation of c-Myc by Oridonin Induces Cell Growth Inhibition and Apoptosis
Hui-Lin Huang, Heng-You Weng, Lu-Qin Wang, Chun-Hong Yu, Qiao-Juan Huang, Pan-Pan Zhao, Jun-Zhi Wen, Hui Zhou, and Liang-Hu Qu
mRNA-29b Suppresses Prostate Cancer Metastasis by Regulating Epithelial–Mesenchymal Transition Signaling
Peng Ru, Robert Steele, Philip Newhall, Nancy J. Phillips, Karoly Toth, and Ratna B. Ray

Therapeutic Significance of Estrogen Receptor β Agonists in Gliomas
Gangadhara R. Sareddy, Binoj C. Nair, Vijay K. Gonugunta, Quan-guang Zhang, Andrew Brenner, Darrell W. Brann, Rajeshwar Rao Tekmal, and Ratna K. Vadlamudi

Multiple Antigenic Peptides Based on H-2Kk-Restricted CTL Epitopes from Murine Heparanase Induce a Potent Antitumor Immune Response In Vivo
Xu-Dong Tang, Guo-Zhen Wang, Jun Guo, Mu-Han Lu, Chuan Li, Ning Li, Ya-Ling Chao, Chang-Zhu Li, Yu-Yun Wu, Chang-Jiang Hu, Dian-Chun Fang, and Shi-Ming Yang

MOLECULAR MEDICINE IN PRACTICE

1193 Cotargeting MAPK and PI3K Signaling with Concurrent Radiotherapy as a Strategy for the Treatment of Pancreatic Cancer
Terence M. Williams, Athena R. Flecha, Paul Keller, Ashwin Ram, David Karnak, Stefanie Galbán, Craig J. Galbán, Brian D. Ross, Theodore S. Lawrence, Alnawaz Rehemtulla, and Judith Sebolt-Leopold

RETRACTION

1214 Retraction in Part: A Genomic Approach to Identify Molecular Pathways Associated with Chemotherapy Resistance

CORRECTION

1216 Correction: Narciclasine, a Plant Growth Modulator, Activates Rho and Stress Fibers in Glioblastoma Cells

ABOUT THE COVER

Several allosteric MEK inhibitors are in clinical development and have been designed to treat patients with tumors harboring RAS/RAF pathway alterations. Acquired resistance to this class of inhibitors is a pressing clinical problem. To identify strategies to overcome this resistance, Hatzivassiliou and colleagues derived and characterized three independent MEK inhibitor-resistant cell lines. All of the resistant cell lines harbored mutations in the allosteric binding pocket of MEK that is targeted by arylamine MEK inhibitors. In all cases the MEK resistant cell lines retained their addiction to the MAPK pathway and remained sensitive to a selective inhibitor of the ERK1/2 kinases, suggesting a role for ERK inhibitors in combating or preventing MEK inhibitor resistance. For details, see article by Hatzivassiliou and colleagues on page 1143.
Molecular Cancer Therapeutics

11 (5)


Updated version
Access the most recent version of this article at:
http://mct.aacrjournals.org/content/11/5

E-mail alerts
Sign up to receive free email-alerts related to this article or journal.

Reprints and Subscriptions
To order reprints of this article or to subscribe to the journal, contact the AACR Publications Department at pub@sacr.org.

Permissions
To request permission to re-use all or part of this article, contact the AACR Publications Department at permissions@sacr.org.