



## CONTENTS

### Advances in Brief

- 2081 Induction of Cancer, Actinic Keratosis, and Specific *p53* Mutations by UVB Light in Human Skin Maintained in Severe Combined Immunodeficient Mice.** Taisei Nomura, Hiroo Nakajima, Tadashi Hongyo, Eiji Taniguchi, Kazuyasu Fukuda, Li Ya Li, Masayuki Kurooka, Kazuo Sutoh, Prakash M. Hande, Takanori Kawaguchi, Masato Ueda, and Hiroshi Takatera.
- 2085 Medulloblastomas of the Desmoplastic Variant Carry Mutations of the Human Homologue of *Drosophila patched*.** Torsten Pietsch, Andreas Waha, Anke Koch, Jürgen Kraus, Steffen Albrecht, Jörg Tonn, Nils Sörensen, Frank Berthold, Bettina Henk, Nicole Schmandt, Helmut K. Wolf, Andreas von Deimling, Brandon Wainwright, Georgia Chenevix-Trench, Otmar D. Wiestler, and Carol Wicking.
- 2089 Constitutive Expression of Mature Transforming Growth Factor  $\beta 1$  in the Liver Accelerates Hepatocarcinogenesis in Transgenic Mice.** Valentina M. Factor, Chien-Yuan Kao, Eric Santoni-Rugiu, Joseph T. Woitach, Michael R. Jensen, and Snorri S. Thorgeirsson.
- 2096 Ionizing Radiation Mediates Expression of Cell Adhesion Molecules in Distinct Histological Patterns within the Lung.** Dennis E. Hallahan and Subbulakshmi Virudachalam.
- 2100 Cytological Detection of Telomerase Activity Using an *in Situ* Telomeric Repeat Amplification Protocol Assay.** Kazuma Ohyashiki, Junko H. Ohyashiki, Jiroh Nishimaki, Keisuke Toyama, Yoshiro Ebihara, Harubumi Kato, Woodring E. Wright, and Jerry W. Shay.
- 2104 Ornithine Decarboxylase Overexpression Leads to Increased Epithelial Tumor Invasiveness.** Mary K. Smith, Mary A. Goral, Jane H. Wright, Lynn M. Matrisian, Rebecca J. Morris, Andres J. P. Klein-Szanto, and Susan K. Gilmour.
- 2109 Inhibition of Breast Cancer Tissue Aromatase Activity and Estrogen Concentrations by the Third-Generation Aromatase Inhibitor Vorozole.** Paul C. de Jong, Joost van de Ven, Hans W. R. Nortier, Inge Maitimu-Smele, Truns H. Donker, Jos H. H. Thijssen, Peter H. T. J. Slee, and Rien A. Blankenstein.
- 2112 *FHIT* Gene Expression in Human Ovarian, Endometrial, and Cervical Cancer Cell Lines.** Denver T. Hendricks, Robert Taylor, Mark Reed, and Michael J. Birrer.
- 2116 Comparative Genomic Hybridization Analysis Detects Frequent, Often High-Level, Overrepresentation of DNA Sequences at 3q, 5p, 7p, and 8q in Human Non-Small Cell Lung Carcinomas.** Binaifer R. Balsara, Gonosuke Sonoda, Stanislas du Manoir, Jill M. Siegfried, Edward Gabrielson, and Joseph R. Testa.
- 2121 Association between Cigarette Smoking and *FHIT* Gene Alterations in Lung Cancer.** Gabriella Sozzi, Laura Sard, Laura De Gregorio, Antonio Marchetti, Katia Musso, Fiamma Buttitta, Silvana Tornielli, Silvia Pellegrini, Maria Luisa Veronese, Giacomo Manenti, Matteo Incarbone, Antonio Chella, Carlo A. Angeletti, Ugo Pastorino, Kay Huebner, Generoso Bevilacqua, Silvana Pilotti, Carlo M. Croce, and Marco A. Pierotti.
- 2124 *TEP1*, Encoded by a Candidate Tumor Suppressor Locus, Is a Novel Protein Tyrosine Phosphatase Regulated by Transforming Growth Factor  $\beta$ .** Da-Ming Li and Hong Sun.
- 2130 A Role for Perlecan in the Suppression of Growth and Invasion in Fibrosarcoma Cells.** Micaela Mathiak, Cigdem Yenisey, Derrick S. Grant, Bela Sharma, and Renato V. Iozzo.
- 2137 Essential Role for Nuclear Phospholipase C  $\beta_1$  in Insulin-like Growth Factor I-induced Mitogenesis.** Lucia Manzoli, Anna Maria Billi, Silvia Rubbini, Alberto Bavelloni, Irene Faenza, R. Stewart Gilmour, Sue-Goo Rhee, and Lucio Cocco.
- 2140 *p16* and *K-ras* Gene Mutations in the Intraductal Precursors of Human Pancreatic Adenocarcinoma.** Christopher A. Moskaluk, Ralph H. Hruban, and Scott E. Kern.
- 2144 Telomerase Activity: A Marker to Distinguish Follicular Thyroid Adenoma from Carcinoma.** Christopher B. Umbricht, Motoyasu Saji, William H. Westra, Robert Udelsman, Martha A. Zeiger, and Saraswati Sukumar.
- 2148 Increased Genetic Stability of HeLa Cells after Connexin 43 Gene Transfection.** Weibin Zhu, Nikolai Mironov, and Hiroshi Yamasaki.
- 2151 Cloning and Characterization of Mammalian 8-Hydroxyguanine-specific DNA Glycosylase/Apurinic, Apyrimidinic Lyase, a Functional mutM Homologue.** Hiroyuki Aburatani, Yoshitaka Hippo, Toshimitsu Ishida, Rieko Takashima, Chikako Matsuba, Tatsuhiko Kodama, Masashi Takao, Akira Yasui, Kazuo Yamamoto, Midori Asano, Kazuhiro Fukasawa, Tomoko Yoshinari, Hideo Inoue, Eiko Ohtsuka, and Susumu Nishimura.

### Regular Articles

#### Biochemistry and Biophysics

- 2157 Factors Affecting Topotecan-induced Programmed Cell Death: Adhesion Protects Cells from Apoptosis and Impairs Cleavage of Poly(ADP-Ribose)Polymerase.** Cecilia M. Whitacre and Nathan A. Berger.
- 2164 Extracellular Factor(s) following Exposure to  $\alpha$  Particles Can Cause Sister Chromatid Exchanges in Normal Human Cells.** Bruce E. Lehnert and Edwin H. Goodwin.
- 2172 Studies on the Metabolism of the Novel Antitumor Agent [*N*-methyl- $^{11}\text{C}$ ][2-(dimethylamino)ethyl]acridine-4-carboxamide in Rats and Humans prior to Phase I Clinical Trials.** Safiye Osman, Sajinder K. Luthra, Frank Brady, Susan P. Hume, Gavin Brown, Robert J. A. Harte, Julian C. Mathews, William A. Denny, Bruce C. Baguley, Terry Jones, and Pat M. Price.

#### Experimental Therapeutics

- 2181 Enhanced Antitumor Activity of Combination Radioimmunotherapy ( $^{131}\text{I}$ -labeled Monoclonal Antibody A33) with Chemotherapy (Fluorouracil).** Jörg Tschmelitsch, Els Barendsward, Clarence Williams, Jr., Tzy-Jyun Yao, Alfred M. Cohen, Lloyd J. Old, and Sydney Welt.
- 2187 Immunotherapy of BALB/c Mice Bearing Ehrlich Ascites Tumor with Vitamin D-binding Protein-derived Macrophage Activating Factor.** Nobuto Yamamoto, and Venkateswara R. Naraparaju.
- 2193 Overexpression of *p21<sup>waf1</sup>* Leads to Increased Inhibition of E2F-1 Phosphorylation and Sensitivity to Anticancer Drugs in Retinoblastoma-negative Human Sarcoma Cells.** WeiWei Li, Jianguo Fan, Daniel Hochhauser, and Joseph R. Bertino.

- 2200 Efficacy of Hyperthermia and Polyunsaturated Fatty Acids on Experimental Carcinoma.** Satoshi Kokura, Toshikazu Yoshikawa, Toshiro Kaneko, Shoji Inuma, Shunichiro Nishimura, Kiichi Matsuyama, Yuji Naito, Norimasa Yoshida, and Motoharu Kondo.
- 2203 Induction of Apoptosis and Inhibition of Small Cell Lung Cancer Growth by the Quinoxaline Tyrphostins.** Geoffrey W. Krystal, Patricia Carlson, and Julie Litz.

### Immunology

- 2209 Selective Up-Regulation of Protein Kinase C  $\eta$  in Phorbol Ester-sensitive versus -resistant EL4 Mouse Thymoma Cells.** Moira S. Resnick, Xuemei Luo, E. Griffith Vinton, and Julianne J. Sando.
- 2216 Enhanced Induction of Very Late Antigen 4/Lymphocyte Function-associated Antigen 1-dependent T-Cell Migration to Tumor Sites following Administration of Interleukin 12.** Makoto Ogawa, Tateki Tsutsui, Jian-Ping Zou, Jie Mu, Rishani Wijesuriya, Wen-Gong Yu, Steven Herrmann, Takeshi Kubo, Hiromi Fujiwara, and Toshiyuki Hamaoka.

### Molecular Biology and Genetics

- 2223 Oncostatin M-mediated Transcriptional Suppression of the c-myc Gene in Breast Cancer Cells.** Michael J. Spence, Robert E. Vestal, and Jingwen Liu.
- 2229 Extensive DNA Methylation Spanning the Rb Promoter in Retinoblastoma Tumors.** Clare Stirzaker, Douglas S. Millar, Cheryl L. Paul, Peter M. Warnecke, Janet Harrison, Paul C. Vincent, Marianne Frommer, and Susan J. Clark.
- 2238 Allelic Deletions on Chromosome 11q13 in Multiple Endocrine Neoplasia Type 1-associated and Sporadic Gastrinomas and Pancreatic Endocrine Tumors.** Larisa V. Debelenko, Zhengping Zhuang, Michael R. Emmert-Buck, Settara C. Chandrasekharappa, Pachiappan Manickam, Siradanahalli C. Guru, Stephen J. Marx, Monica C. Skarulis, Allen M. Spiegel, Francis S. Collins, Robert T. Jensen, Lance A. Liotta, and Irina A. Lubensky.
- 2244 Involvement of the Fanconi's Anemia Protein FAC in a Pathway That Signals to the Cyclin B/cdc2 Kinase.** Frank A. E. Kruyt, Lonkeke M. Dijkmans, Fré Arwert, and Hans Joenje.
- 2252 Effect of Mimosine on DNA Synthesis in Mammalian Cells.** Lyuben M. Tsvetkov, George C. Russev, and Boyka B. Anachkova.

- 2256 FHIT and FRA3B 3p14.2 Allele Loss Are Common in Lung Cancer and Preneoplastic Bronchial Lesions and Are Associated with Cancer-related FHIT cDNA Splicing Aberrations.** Kwun M. Fong, Eric J. Biesterveld, Arvind Virmani, Ignacio Wistuba, Yoshitaka Sekido, Scott A. Bader, Mohsen Ahmadian, S. Tiong Ong, Feyruz V. Rassool, Paul V. Zimmerman, Giuseppe Giaccone, Adi F. Gazdar, and John D. Minna.

- 2268 Activating Mutations in the N- and K-ras Oncogenes Differentially Affect the Growth Properties of the IL-6-dependent Myeloma Cell Line ANBL6.** Daniel Billadeau, Pocheng Liu, Diane Jelinek, Nisha Shah, Tucker W. LeBien, and Brian Van Ness.

- 2276 Misexpression of Disrupted HMGI Architectural Factors Activates Alternative Pathways of Tumorigenesis.** Alexei Tkachenko, Hena R. Ashar, Aurelia M. Meloni, Avery A. Sandberg, and Kiran K. Chada.

### Tumor Biology

- 2281 Regulation of CD44v6-containing Isoforms during Proliferation of Normal and Malignant Epithelial Cells.** Tero Soukka, Marko Salmi, Heikki Joensuu, Lari Häkkinen, Petri Sointu, Leena Koulou, Kirsti Kalimo, Pekka Klemi, Reidar Grénman, and Sirpa Jalkanen.
- 2290 Amplification of the Genes BCHE and SLC2A2 in 40% of Squamous Cell Carcinoma of the Lung.** Nicole Brass, Alexander Rácz, Dirk Heckel, Klaus Remberger, Gerhard W. Sybrecht, and Eckart U. Meese.
- 2295 Expression of MCAM/MUC18 by Human Melanoma Cells Leads to Increased Tumor Growth and Metastasis.** Shanhai Xie, Mario Luca, Suyun Huang, Mordechai Gutman, Reuven Reich, Judith P. Johnson, and Menashe Bar-Eli.
- 2304 Reexpression of the Major Protein Kinase C Substrate, SSeCKS, Suppresses v-src-induced Morphological Transformation and Tumorigenesis.** Xueying Lin and Irwin H. Gelman

### Letters to the Editor

- 2313 Correspondence re: M. Stephen Meyn, Ataxia Telangiectasia and Cellular Responses to DNA Damage. Cancer Res., 55: 5991-6001, 1995. Letter by J. Martin Brown. Reply by M. Stephen Meyn.**

### 2316 Announcements

1998 Annual Meeting  
 Future Annual Meetings of the AACR  
 Call for Nominations for the AACR  
 Awards  
 AACR Special Conferences in Cancer  
 Research  
 Calendar of Events

### 2319 Author Index

Forms available in the back  
 of this issue:

Application for Active and  
 Corresponding Membership

Application for Associate  
 Membership

Also available in the back  
 of this issue:

Guidelines for Submitting Disks to  
 AACR Publications