

REVIEWS

Carcinogenesis and microsatellite instability: the interrelationship between genetics and epigenetics K.Imai and H.Yamamoto **673**

Detection of chromosome changes in pathology archives: an application of microwave-assisted fluorescence *in situ* hybridization to human carcinogenesis studies H.Sugimura **681**

CANCER BIOLOGY

15-Deoxy- $\Delta^{12,14}$ -prostaglandin J₂ induces COX-2 expression through Akt-driven AP-1 activation in human breast cancer cells: a potential role of ROS E.-H.Kim, H.-K.Na, D.-H.Kim, S.-A.Park, H.-N.Kim, N.-Y.Song and Y.-J.Surh **688**

Cyr61/CCN1 and CTGF/CCN2 mediate the proangiogenic activity of *VHL*-mutant renal carcinoma cells M.R.Chintalapudi, M.Markiewicz, N.Kose, V.Dammai, K.J.Champion, R.S.Hoda, M.Trojanowska and T.Hsu **696**

Macrophage inhibitory cytokine-1 activates AKT and ERK-1/2 via the transactivation of ErbB2 in human breast and gastric cancer cells K.-K.Kim, J.J.Lee, Y.Yang, K.-H.You and J.-H.Lee **704**

Reactive oxygen species stabilize hypoxia-inducible factor-1 alpha protein and stimulate transcriptional activity via AMP-activated protein kinase in DU145 human prostate cancer cells S.-N.Jung, W.K.Yang, J.Kim, H.S.Kim, E.J.Kim, H.Yun, H.Park, S.S.Kim, W.Choe, I.Kang and J.Ha **713**

Cells deficient in oxidative DNA damage repair genes *Myh* and *Ogg1* are sensitive to oxidants with increased G₂/M arrest and multinucleation Y.Xie, H.Yang, J.H.Miller, D.M.Shih, G.G.Hicks, J.Xie and R.P.Shui **722**

Interactions of acetylcholinesterase with caveolin-1 and subsequently with cytochrome *c* are required for apoptosome formation S.E.Park, S.H.Jeong, S.-B.Yee, T.H.Kim, Y.H.Soung, N.C.Ha, N.D.Kim, J.-Y.Park, H.R.Bae, B.S.Park, H.J.Lee and Y.H.Yoo **729**

GLI1 repression of ERK activity correlates with colony formation and impaired migration in human epidermal keratinocytes G.W.Neill, W.J.Harrison, M.S.Ikram, T.D.L.Williams, L.S.Bianchi, S.K.Nadendla, J.L.Green, L.Ghali, A.-M.Frischauf, E.A.O'Toole, F.Aberger and M.P.Philpott **738**

Telomere dysfunction promotes genome instability and metastatic potential in a K-ras p53 mouse model of lung cancer S.A.Perera, R.S.Maser, H.Xia, K.McNamara, A.Protopopov, L.Chen, A.F.Hezel, C.F.Kim, R.T.Bronson, D.H.Castrillon, L.Chin, N.Bardeesy, R.A.DePinho and K.-K.Wong **747**

MOLECULAR EPIDEMIOLOGY

***MDM2* SNP309 G allele increases risk but the T allele is associated with earlier onset age of sporadic breast cancers in the Chinese population** S.S.Lum, H.W.Chua, H.Li, W.-F.Li, N.Rao, J.Weil, Z.Shao and K.Sabapathy **754**

Constitutional CHEK2 mutations are associated with a decreased risk of lung and laryngeal cancers C.Cybulski, B.Masojć, D.Oszutowska, E.Jaworowska, T.Grodzki, P.Waloszczuk, P.Serwatowski, J.Pankowski, T.Huzarski, T.Byrski, B.Górski, A.Jakubowska, T.Dębniak, D.Wokołorczyk, J.Gronwald, C.Tarnowska, P.Serrano-Fernández, J.Lubiński and S.A.Narod **762**

Estrogen-biosynthesis gene *CYP17* and its interactions with reproductive, hormonal and lifestyle factors in breast cancer risk: results from the Long Island Breast Cancer Study Project Y.Chen, M.D.Gammon, S.L.Teitelbaum, J.A.Britton, M.B.Terry, S.Shantakumar, S.M.Eng, Q.Wang, I.Gurvich, A.I.Neugut, R.M.Santella and H.Ahsan **766**

Comparison of induced and cancer-associated mutational spectra using multivariate data analysis P.D.Lewis, B.Manshian, M.N.Routledge, G.B.Scott and P.A.Burns **772**

Please visit the journal's World Wide Web site at www.carcin.oxfordjournals.org

CANCER PREVENTION

- Curcumin downregulates the inflammatory cytokines CXCL1 and -2 in breast cancer cells via NFκB** B.E.Bachmeier, I.V.Mohrenz, V.Mirisola, E.Schleicher, F.Romeo, C.Höhneke, M.Jochum, A.G.Nerlich and U.Pfeffer **779**
- Dietary fish oil and pectin enhance colonocyte apoptosis in part through suppression of PPARδ/PGE₂ and elevation of PGE₃** J.Vanamala, A.Glagolenko, P.Yang, R.J.Carroll, M.E.Murphy, R.A.Newman, J.R.Ford, L.A.Braby, R.S.Chapkin, N.D.Turner and J.R.Lupton **790**
- Tumor angiogenesis suppression by α-eleostearic acid, a linolenic acid isomer with a conjugated triene system, via peroxisome proliferator-activated receptor γ** T.Tsuzuki and Y.Kawakami **797**
- Expression of MRP1 and GSTP1-1 modulate the acute cellular response to treatment with the chemopreventive isothiocyanate, sulforaphane** M.B.Sibhatu, P.K.Smitherman, A.J.Townsend and C.S.Morrow **807**
- Lycopene inhibits IGF-I signal transduction and growth in normal prostate epithelial cells by decreasing DHT-modulated IGF-I production in co-cultured reactive stromal cells** X.Liu, J.D.Allen, J.T.Arnold and M.R.Blackman **816**
- Plasminogen activator inhibitor-1 (Pai-1) blockers suppress intestinal polyp formation in Min mice** M.Mutoh, N.Niho, M.Komiya, M.Takahashi, R.Ohtsubo, K.Nakatogawa, K.Ueda, T.Sugimura and K.Wakabayashi **824**
- Chemopreventive effects of a selective cyclooxygenase-2 inhibitor (etodolac) on chemically induced intraductal papillary carcinoma of the pancreas in hamsters** T.Adachi, Y.Tajima, T.Kuroki, T.Mishima, A.Kitasato, N.Tsuneoka and T.Kanematsu **830**
- Protective versus promotional effects of white tea and caffeine on PhIP-induced tumorigenesis and β-catenin expression in the rat** R.Wang, W.M.Dashwood, C.V.Löhr, K.A.Fischer, C.B.Pereira, M.Louderback, H.Nakagama, G.S.Bailey, D.E.Williams and R.H.Dashwood **834**

CARCINOGENESIS

- Biological behavior of CIN lesions is predictable by multiple parameter logistic regression models** D.van Hamont, J.Bulten, H.Shirango, W.J.G.Melchers, L.F.A.G.Massuger and P.C.M.de Wilde **840**
- Fez1/Lzts1*-deficient mice are more susceptible to *N*-butyl-*N*-(4-hydroxybutyl) nitrosamine (BBN) carcinogenesis** R.Baffa, M.Fassan, C.Sevignani, A.Vecchione, H.Ishii, E.Giarnieri, R.V.Iozzo, L.G.Gomella and C.M.Croce **846**
- BAG-1 is up-regulated in colorectal tumour progression and promotes colorectal tumour cell survival through increased NF-κB activity** N.K.Clemo, T.J.Collard, S.L.Southern, K.D.Edwards, M.Moorghen, G.Packham, A.Hague, C.Paraskeva and A.C.Williams **849**
- SAG/ROC2/RBX2 E3 ligase promotes UVB-induced skin hyperplasia, but not skin tumors, by simultaneously targeting c-Jun/AP-1 and p27** H.He, Q.Gu, M.Zheng, D.Normolle and Y.Sun **858**
- Mgmt* deficiency alters the *in vivo* mutational spectrum of tissues exposed to the tobacco carcinogen 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone (NNK)** L.E.Sandercock, J.N.Hahn, L.Li, H.A.Luchman, J.L.Giesbrecht, L.A.Peterson and F.R.Jirik **866**
- p53* codon 72 polymorphism associated with risk of human papillomavirus-associated squamous cell carcinoma of the oropharynx in never-smokers** X.Ji, A.S.Neumann, E.M.Sturgis, K.Adler-Storthz, K.R.Dahlstrom, J.T.Schiller, Q.Wei and G.Li **875**
- A protective role of mast cells in intestinal tumorigenesis** M.J.Sinnamon, K.J.Carter, L.P.Sims, B.LaFleur, B.Fingleton and L.M.Matrisian **880**