inventions to extend market coverage for U.S. companies and may also be available for licensing.

ADDRESSES: Licensing information and copies of the U.S. patent applications and issued patents listed below may be obtained by writing to John Fahner-Vihtelic, Technology Licensing Specialist, Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Box 13, Rockville, Maryland 20852–3804 (telephone 301/496-7735 ext 285; fax 301/402-0220). A signed Confidential Disclosure Agreement (CDA) will be required to receive copies of the patent applications. Requests for copies of issued patents do not require the execution of a CDA.

Methods For Determining The Presence Of Functional p53 In Mammalian Cells

Fornace, A.J., Kastan, M.B. (NCI) Filed 10 Aug 94 Serial No. 08/288,872 (CON of 07/974,960)

The protein p53 is involved in tumorigenesis. Recent observations have indicated that the gene encoding p53 is a tumor suppressor gene; however, mutation or deletion of this gene results in loss of this suppressor function. Mutations of the p53 gene have been demonstrated in tumors of the colon, breast, lung, ovary, bladder, and other organs, making the p53 gene the most commonly mutated gene yet identified in human cancers. While currently used assays can detect the presence of wildtype or mutant p53 protein in mammalian cells, they cannot accurately determine the presence of functional p53 protein in these cells, which is necessary to determine the biological function of functional p53 and to develop subsequent diagnostic modalities using functional p53. This invention describes a specific gene whose expression is dependent on the presence of functional p53 in cells and tumors, as well as methods by which the presence of this gene may be detected. It also describes a diagnostic kit utilizing a nucleic acid sequence capable of binding functional p53, which is then measured to detect p53 presence. Issuance of a patent on this invention is currently pending. [portfolio: Cancer—Diagnostics]

Novel B-Lymphoma Cell Line And Antigen

Bock, G.H., Nelson, D.L., Kurman, C.C., Fleisher, T.A. (NCI) Filed 9 Aug 94 Serial No. 08/287,718 (FWC of 07/934,106)

Various cell lines of B-cell lineage have been produced, but none have been of tumor cell origin. This case provides an IL-6 dependent B-cell lymphoma cell line, designated DS-l. The invention further provides a monoclonal antibody which reacts with the cell line and a method for detecting the presence of neoplastic cells by detecting the presence of an antigen on a cell which is not normal for that cell type. [portfolio: Cancer—Diagnostics; Cancer—Research Reagents]

Novel Human ras-Related Oncogenes Unmasked By Expression cDNA Cloning

Aaronson, S., Chan, A., Miki, T. (NCI) Filed 24 May 94 Serial No. 08/247,946

A family of small G-proteins encoded by H-, K-, and N-ras is frequently activated as oncogenes in a wide variety of human tumors. Activation is usually due to a point mutation within the coding sequence which results in the molecule to be constitutively in the GTP bound (active) state. In normal cells, these proteins are coupled to growth factor signaling pathways and appear to cause proliferation or differentiation. Over the past several years, cloning efforts by many laboratories have greatly expanded the number of ras-related proteins, to include R-ras, K-rev-l/rap and TC21. The present invention relates to a mutant TC21 protein that was cloned from an expression cDNA from a ovarian carcinoma cell line. Based upon the finding that an oncogenic form of TC21 exists, the present invention also relates to the generation of point mutations in R-ras for expression study. The present invention also relates to methods of diagnosing cancers or monitoring disease progression by detecting mutant forms of R-ras or TC21 at the protein or gene level. [portfolio Cancer—Diagnostics; Cancer—Research Reagents

Immortalized Adult Human Prostate Epithelial Cell Lines

Rhim, J.S., Webber, M.M. (NCI) Filed 28 Apr 94 Serial No. 08/234,843

This invention relates to cell lines which are useful in testing compounds for anti-carcinogenic, anti-neoplastic, anti-invasive, or anti-metastatic activity by growing the cell line in the presence of the subject compounds. The cell lines contain DNA of a human Papilloma virus (HPV), either alone or with an activated viral ras oncogene, e.g., v-Kiras. The HPV immortalized line is not tumorigenic; however, the V-Ki-ras transformed HPV cell line is tumorigenic. They are useful for determining causes, treatment, and prevention of prostate cancer, benign

prostate hyperplasic, male infertility, birth defects, aging, and assessment of environmental toxic agents. [portfolio: Cancer—Research Reagents]

Pulsed Low Frequency EPR Spectrometer And Imager

Bourg, J., Cherukuri, M., Mitchell, J., Mirotznik, M., Roth, B., Subramanian, S. (NCI) Serial No. 08/097,811 Patent Issued 7 Feb 95 U.S. Patent No. 5,387,867

This application describes an Electron Paramagnetic Resonance (EPR) spectroscopy imaging system. This system generates broadband pulses having a RF carrier frequency that is not highly absorbed by biological materials. The pulse generating system includes up and down chirp converters for frequency modulating of a carrier frequency and compression of the frequency modulated pulse to form a broadband excitation pulse of high energy. This technology's function has been proven and could form the basis of a clinical imaging device capable of high sensitivity to free radical species in human patients. [portfolio: Devices/ Instrumentation—Diagnostics, electron paramagnetic resonance]

Phosphonoalkyl Phenylalanine Compounds Suitably Protected For Use In Peptide Synthesis

Burke, T.R, Smyth, M.S., Lim, B.B. (NCI) Filed 8 Jun 93 Serial No. 08/073,088

A novel class of phosphononodifluoromethyl phenylalanine ("F₂Pmp") derivatives have been developed which are suitable for the synthesis of peptides containing the phosphotyrosyl (pTyr) mimetic, F₂Pmp. These analogues bear Boc or Fmoc protection at the N^{α} -position for either solution or solid-phase peptide synthesis using standard techniques. A number of studies have shown that peptides containing the F₂Pmp residue show utility as inhibitors of src homology 2 (SH2) domain binding interactions and of phosphotyrosyl phosphatases. Unlike pTyr residues, the F₂Pmp moiety is stable to both chemical and phosphatase-mediated hydrolysis, making it an attractive replacement for pTyr in signal transduction peptides. [portfolio: Cancer—Research Reagents]

Monoclonal Antibodies To Prostate Cells

Pastan, I. (NCI) Filed 8 Oct 92 Serial No. 07/958,140

Monoclonal antibodies which bind to an antigen associated with prostate cells, including prostate cancer, can be