generated using the rat growth hormone gene promoter (rGH) to target ffLuc-eGFP fusion gene expression to the pituitary gland, restricting any resulting interfering reporter signal within the head. This allows the tracking of cancer progression throughout the body, where the reporter activity of introduced ffLuc/eGFP-labeled tumors is maintained, despite normal immune function. These immunocompetent rGH-ffLuc-eGFP transgenic mice can be used as hosts in cancer models, allowing long-term in vivo monitoring of the progression of ffLuc/eGFP-labeled tumor cells in the body, which may lead to more clinically relevant insights into cancer progression, metastases and response to therapies.

Applications

- In vivo model for studying tumor progression and testing anti-cancer therapeutics using ffLuc or eGFP labeling for bioimaging.
- Since rGH-ffLuc-eGFP is also a growth hormone-responsive reporter, these rGH-Luc-GFP mice may also be used to screen growth-hormone stimulating drugs for treating Achondroplasia (dwarf syndrome) or as a test for illegal performance-enhancing drugs.

Advantages

- This technology represents a more clinically relevant in vivo model of cancer progression for testing anti-cancer therapeutics.
- This immunocompetent mouse model is more desirable as a pre-clinical model over the currently used immunodeficient mouse models as immune function is crucial for tumor development and progression.

Development Status

- Early-stage.
- Pre-clinical.
- In vitro data available.
- In vivo data available (animal).

Inventors: Chi-Ping Day and Glenn Merlino (NCI).

Relevant Publications


License Status: Available for licensing.

License Contact: Sabarni K. Chatterjee, PhD; 301–435–5587; chatterjeesa@mail.nih.gov.

Collaborative Research Opportunity: The National Cancer Institute Center for Cancer Research is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize immunocompetent rGH-ffLuc-eGFP transgenic mice. Please contact John Hewes, PhD at 301–435–3121 or hewesj@mail.nih.gov for more information.

Dated: July 1, 2011.

Richard U. Rodriguez,
Director, Division of Technology Development and Transfer, Office of Technology Transfer, National Institutes of Health.

[FR Doc. 2011–17228 Filed 7–7–11; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

Government-Owned Inventions; Availability for Licensing

AGENCY: Public Health Service, National Institutes of Health, HHS.

ACTION: Notice.

SUMMARY: The inventions listed below are owned by an agency of the U.S. Government and are available for licensing in the U.S. in accordance with 35 U.S.C. 207 to achieve expeditious commercialization of results of Federally-funded research and development. Foreign patent applications are filed on selected inventions to extend market coverage for companies and may also be available for licensing.

ADDRESS: Licensing information and copies of the U.S. patent applications listed below may be obtained by writing to the indicated licensing contact at the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, Maryland 20852–3804; telephone: 301–496–7057; fax: 301–402–0220. A signed Confidential Disclosure Agreement will be required to receive copies of the patent applications.

Mouse Model and Derived Cells That Hypersecrete Leukemia Inhibitory Factor (LIF)

Description of Technology: Embryonic stem cells (ESCs) are pluripotent cells that can be cultured indefinitely, and maintain their capability to differentiate into all cell lineages. To maintain these cells as well as various types of related induced stem cells and progenitor cells in culture, Mouse Embryonic Fibroblasts (MEFs) are routinely used as feeder cells, largely to serve as a source of Leukemia Inhibitory Factor (LIF). ESCs can also be cultured without feeders if the medium is supplemented with recombinant LIF and other factors. However, these methods of culturing ESCs suffer from certain drawbacks, such as limited proliferation capacity and variability of primary MEFs. Therefore, finding improved conditions that maintain ESC pluripotency is an area of great interest.

Scientists at NIEHS have now developed a knock-in (KI) mouse model in which LIF is overproduced from its endogenous locus because of increased stability of its mRNA. MEFs and presumably other cells derived from the homozygous mice hypersecrete LIF protein; lesser degrees of overexpression would be expected from heterozygous mice. These mice can be used to study LIF function, including how LIF contributes to various physiological and pathological states. Cells derived from these mice can be used to culture ESCs, as well as other progenitor cells. Cells or genetic material derived from these mice can also be used as sources of LIF for isolation and purification.

Applications

- Maintenance of ESCs and progenitor cells.
- In vivo, cellular and cell-free sources of LIF.
- Sources of LIF for isolation and purification.
- Studies of LIF function in mice, such as contribution of LIF to tumor growth.

Inventors: Dr. Perry Blackshear (NIEHS), et al.
Inhibitors of Human Apurinic/Apyrimidinic Endonuclease 1 (APE1), an Anticancer Drug Target

Description of Technology: APE1 is the primary mammalian enzyme responsible for the removal of abasic (AP) sites in DNA and functions as part of the base excision DNA repair pathway (BER). BER is instrumental in the repair of DNA damage caused by DNA alkylating agents (e.g., many cancer chemotherapeutics). APE1 has been shown to be overexpressed in cancer cells. It has been postulated that APE1 would be an attractive target in anticancer treatment paradigms; preclinical and clinical data confirm that APE1 is a valid anticancer drug target.

To date, only one APE1 small molecule inhibitor has progressed to clinical trials (methoxyamine hydrochloride), and this compound inhibits a wide range of repair processes, which could result in undesired side-effects. The NIH inventors now report the discovery of a novel APE1 small molecule inhibitor, which exhibits potent in vitro activity, potentiates the cytotoxicity of DNA damaging agents (alkylators methylmethane sulfonate and Temozolomide), results in the accumulation of AP sites, and has favorable pharmacokinetic properties. The inventors plan to carry out further studies in mouse tumor xenograft models.

Applications: Cancer therapeutics as single agent as well as in combination therapy.

Development Status: In vivo pharmacokinetics data on lead compounds available.

Inventors: David J. Maloney, et al. (NHGRI).
Publication: Manuscript submitted.
Licensing Status: Available for licensing.
Licensing Contact: Betty B. Tong, PhD; 301–594–6565; tongb@mail.nih.gov.

Collaborative Research Opportunity: The NIEHS Laboratory of Signal Transduction is seeking statements of capability or interest from parties interested in collaborative research to further develop, evaluate, or commercialize these mice or other strains derived from them, or cells or other reagents derived from them.
Please contact Dr. Elizabeth Denholm (denholme@niehs.nih.gov) in the NIEHS Office of Technology Transfer, or the Inventor Dr. Perry Blackshear (black009@niehs.nih.gov) for more information.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health
National Center on Minority Health and Health Disparities; Notice of Closed Meeting

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable materials, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Center on Minority Health and Health Disparities Special Emphasis Panel, U24 Grant Review.
Date: July 11–12, 2011.
Time: 8 a.m. to 5 p.m.
Agenda: To review and evaluate grant applications.
Contact Person: Robert Nettey, M.D., Chief, Scientific Review Officer, National Institute on Minority Health and Health Disparities, 6707 Democracy Boulevard, Suite 800, Bethesda, MD 20892. (301) 496–3996.

This notice is being published less than 15 days prior to the meeting due to the timing limitations imposed by the review and funding cycle.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health
National Center for Research Resources; Notice of Closed Meetings

Pursuant to section 10(d) of the Federal Advisory Committee Act, as amended (5 U.S.C. App.), notice is hereby given of the following meetings.

The meetings will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Center for Research Resources Special Emphasis Panel, NCRR Animal Resource.
Date: July 28, 2011.
Time: 1 to 2 p.m.
Agenda: To review and evaluate grant applications.
Place: National Institutes of Health/NCRR/OR, Democracy 1, 6701 Democracy Blvd., 1078, Bethesda, MD 20892.

Contact Person: Lee Warren Slice, PhD, Scientific Review Officer, Office of Review, National Center for Research Resources, 6701...