all data to the Collaborator as soon as they become available.

3. Conduct controlled clinical trials of antiflammin formulations that have been determined to have therapeutic potential in ocular and skin inflammatory diseases.

The role of the Collaborator(s) will be to:

1. Perform an exhaustive evaluation of these compounds with respect to their biological activities and to develop appropriate vehicles for drug delivery for disease processes covered under the CRADA. The Collaborator(s) will supply data to the NEI and/or NIAMS in a timely fashion.

2. Synthesize and formulate structural variants of these subject compounds to optimize desired effects.

3. Expand the basic toxicological data as needed in preparation for additional clinical studies.

4. Conduct basic studies designed to better understand the potential for antiflammins in the treatment of inflammatory diseases, bioavailability and how to best administer these agents.

5. Support the execution of clinical trials designed to evaluate efficacy and toxicity. This may include providing pharmaceutical grade compound, equipment and supplies, and support personnel.

6. Provide new and improved formulations in appropriate vehicles.

Selection criteria for choosing the CRADA partner(s) will include but not be limited to:

1. Ability to complete the quality pharmacological evaluations required according to an appropriate timetable to be outlined in the Collaborator's proposal. The target commercial application as well as the strategy for evaluating the test agents' potential in that capacity must be clearly delineated therein.

2. The level of financial support the Collaborator will supply for CRADA-related Government activities.

3. A willingness to cooperate with the NEI and NIAMS in publication of research results.

4. An agreement to be bound by the DHHS rules involving human subjects, patent rights, ethical treatment of animals, and randomized clinical trials.

5. Agreement with provisions for equitable distribution of patent rights to any inventions developed under the CRADA(s). Generally, the rights of ownership are retained by the organization which is the employer of the inventor, with (1) an irrevocable, non-exclusive, royalty-free license to the Government (when a company employee is the sole inventor) or (2) an option to negotiate an exclusive or non-exclusive license to the company on terms that are appropriate (when the Government employee is the sole inventor).

Dated: December 23, 1996.

Barbara M. McGarey,

Deputy Director, Office of Technology Transfer.

[FR Doc. 97–333 Filed 1–7–97; 8:45 am]

BILLING CODE 4140–01–M

National Institutes of Health

National Center for Research Resources: Licensing Opportunity and/or Opportunity for a Cooperative Research and Development Agreement (CRADA) for the Development of Technologies and Applications for Spatial and Temporal Control of Gene Expression Using a Heat Shock Protein Promoter in Combination With Local Heat

AGENCY: National Institutes of Health, PHS, HHS.

ACTION: Notice.

SUMMARY: The National Center for Research Resources (NCRR) and collaborating institutes of the NIH are seeking CRADA partners and/or licensees for the development of different technologies and applications to provide a safe and efficient introduction of exogenous genes under the control of a heat-sensitive promoter and to assess the efficacy of spatial and temporal control of gene expression using MRI guided FUS. This project is with the In Vivo NMR Research Center, NCRR, in a collaborative study with the National Institute on Aging, the National Heart Lung and Blood Institute, and the National Institute of Dental Research of the National Institutes of Health, Bethesda, Maryland

The NCRR has applied for patents claiming this core technology. Non-exclusive and/or exclusive licenses for these patents covering core aspects of this project are available (in accordance with 35 U.S.C. 207 and 37 CFR Part 404) to interested parties.

DATES: There is no deadline by which license applications or CRADA proposals must be received.

ADDRESSES: CRADA capability statements/proposals and questions about this opportunity should be addressed to Mr. Tom Ingalls, Technology Transfer Specialist, NCRR, Bldg. 12A/Room 4057, Bethesda, Maryland 20892–2490; Phone: 301/496–6235.

Licensing applications and licensing inquiries regarding this technology should be addressed to Mr. Larry Tiffany, Office of Technology Transfer, 6011 Executive Boulevard, Suite 325, Rockville, Maryland 20852–3804; Phone: 301/496–7735, ext. 206; Fax: 301/402–0220.

Information on the patent and patent applications and pertinent information not yet publicly described can be obtained under a Confidential Disclosure Agreement. Respondees interested in licensing the invention(s) will be required to submit an Application for License to Public Health Service Inventions. Respondees interested in submitting a CRADA proposal should be aware that it may be necessary to secure a license to the above patent rights in order to commercialize products arising from a CRADA agreement.

SUPPLEMENTARY INFORMATION: In many instances, it is desirable to express exogenous genes only in certain tissues, and/or at will at certain times, and/or only to a certain degree. However, current gene transfer and exogenous gene expression protocols do not provide adequate means of simultaneously controlling which cells in a heterogeneous population are transformed and when, where, and to what degree the transferred genes are expressed. Here, we seek to accomplish the spatial and local control of expression of exogenous genes using a heat-inducible promoter (such as the inducible hsp70 promoter) in combination with local heat, preferably provided by Magnetic Resonance Imaging (MRI) guided Focused Ultrasound (FUS).

The goals of this project are to use the respective strengths of both parties to achieve one or more of the following:

1. Evaluate the feasibility and safety of gene therapy utilizing a range of suitable vectors as a treatment approach to carry out a systemic gene transfer in which the therapeutic gene is under the control of a heat-sensitive promoter showing negligible constitutive expression at normal body temperature.

2. Evaluate the feasibility of controlling the local and temporal induction of gene expression (pharmacokinetics) using local heat provided by Magnetic Resonance Imaging guided Focused Ultrasound.

3. Develop and evaluate gene therapy products for use in experimental animal models and for human use based on the above control of expression.

It is anticipated that the commercial collaborator(s) will participate in ongoing studies on one or more of the research projects involving:

1. The transfer of genes for various lymphokines into experimental animal

models based on an adenovirus vector or other vectors. It is highly desirable that the collaborator have the resources to provide new effective vectors for gene transfer.

2. The modulation of the inducibility of the heat-sensitive promoter using appropriate modifications of the promoter and by using anti-inflammatory or other drugs.

3. Dosage and toxicity of local production of lymphokines applied to cancer and other diseases.

4. Initial applications in the field of anticancer therapy, immunomodulatory gene products and angiogenesis.

The collaborator may also be expected to contribute financial support under this CRADA for supplies and personnel to support these projects.

Dated: December 19, 1996.

Barbara M. McGarey,

Deputy Director, Office of Technology Transfer.

[FR Doc. 97–335 Filed 1–7–97; 8:45 am]

BILLING CODE 4140–01–M

Government-Owned Inventions; Availability for Licensing

AGENCY: National Institutes of Health, HHS.

ACTION: Notice.

The inventions listed below are owned by agencies 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 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 contacting the indicated licensing specialist 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.

Chimeric GAG Pseudovirions

GJ Tobin, MA Gonda (NCI)
OTT Reference No. E–105–96/0 filed 16 May 96
Licensing Contact: Cindy K. Fuchs, J.D., 301/496–7735 ext 232

This technology is based upon a novel method for generating pseudovirions containing HIV Gag and chimeric Gag-Env fusion proteins that may be used in a prophylactic vaccine or to boost the immune response of HIV-infected individuals. In addition to the foregoing method, the invention provides recombinant chimeric nucleic acids encoding a Gag-frameshift (fs)-fusion partner fusion protein; a pseudovirion comprising a retroviral Gag protein and a fusion partner; an immunogenic composition comprising a pseudovirion; and a Gag-fs-fusion partner fusion protein. Mice inoculated with the pseudovirions developed cytotoxic T lymphocyte responses specific to both HIV Gag and Env epitopes as well as a strong humoral response to Gag. The method allows the packaging of other non-viral proteins such as interleukins, interferons, and other cytokines. (portfolio: Infectious Diseases—Vaccines, viral, AIDS)

MHC Class II–Restricted Melanoma Antigens and Their Use in Therapeutic Methods

SL Topalian, SA Rosenberg, P Robbins (NCI)
Serial No. 08/533,895 filed 26 Sep 95
Licensing Contact: Joseph Contrera, M.S., J.D., 301/496–7056 ext 244

The present invention relates to MHC class II-restricted melanoma antigens and their use in the treatment of human cancers. Cytotoxic $CD8^+$ T cells have been shown to recognize autologous and MHC class I compatible allogenic melanomas expressing shared tumor-associated antigens. Several class I-restricted melanoma-associated antigens have been identified on a molecular level. These antigens and derivative class I-restricted peptides 8 to 10 amino acids in length are being developed as clinical vaccines to stimulate $CD8^+$ T cell responses against melanoma. While $CD8^+$ T cells are important in the effector phase of the immune response, the $CD4^+$ helper arm has been shown to mediate critical priming and effector functions as well. T cell receptors on $CD4^+$ T cells recognize a complex of antigenic peptide in conjunction with MHC class II molecules. Most of these antigenic peptides are 10–34 amino acids in length. Strong and lasting immunity depends, in part, on $CD4^+$ T cell function. Therefore, class II-restricted melanoma antigens may be useful in immunotherapeutic approaches to melanoma.

The present invention relates to MHC class II-restricted melanoma antigens recognized by $CD4^+$ T cells and the nucleic acid sequences that encode them. The invention contains claims to MHC class II immunogenic peptides of tyrosinase and methods of producing an immune response to these peptides. This invention also provides a method for identifying additional class II-restricted melanoma antigens. (portfolio: Cancer—Therapeutics, vaccines; Cancer—Therapeutics, immunomodulators and immunostimulants; Cancer—Therapeutics, biological response modifiers)

eps15, Substrate for the Epidermal Growth Factor Receptor Kinase

PP DiFiore, F Fazioli (NCI)
Filed 07 Jun 95
Serial Nos. 08/480,145 and 08/477,389 (both DIV of 08/095,737, now U.S. Patent 5,487,979)
Licensing Contact: Susan Rucker, J.D., 301/496–7056 ext 245

These applications describe eps15, a substrate for the Epidermal Growth Factor Receptor (EGFR). This substrate is distinct from a previously identified substrate for the EGFR known as eps8 (U.S. Patent 5,378,809). EGFR is a cell surface receptor, with tyrosine kinase activity, which as been implicated in mitogenesis via a process known as mitogenic signal transduction. Substrates for the EGFR, such as eps15, may be useful in research on signal transduction involving EGFR, and as diagnostic or prognostic indicators due to their ability to be used in determining the tyrosine kinase activity of tissue sample. In particular, recent work with eps15 fusion proteins has shown that eps15 may be linked to myeloid leukemia due to its translocation. Thus, eps15 may also serve as a tumor marker. In addition to the cDNA, constructs expressing eps15, antibodies to eps15, and methods for assaying eps15 (immunological and DNA based) are described. (portfolio: Research Tools and Reagents, receptors and cell lines; Cancer—Research Reagents)

T-Cell Receptors and Their Use In Therapeutic and Diagnostic Methods

P Hwu, M Nishimura, SA Rosenberg (NCI)
Serial No. 08/411,098 filed 27 Mar 95
Licensing Contact: Joseph Contrera, M.S., J.D., 301/496–7056 ext 244

Tumor infiltrating lymphocytes (TIL) play an important role in tumor regression. TIL cells that recognize a variety of specific tumor antigens have been identified. This invention embodies nucleic acid and amino acid sequences of T-cell receptors which recognize or bind tumor antigens. The claims of this invention relate to the use of these T-cell receptors or hematopoietic stem cells engineered to carry these receptors or chimeric receptors comprised of an antibody variable region joined to the cytoplasmic region of CD28 from a T-cell for therapeutic uses. This