analysis. This method has been used in *S. cerevisiae* for many yeast 
chromosomal genes and the human gene 
p53 and has obvious potential for use 
with YAC and TAR clones. Claims are 
directed to several methods for 
generating DNA nucleic acid mutations 
in vivo and are applicable to any 
organism that has a homologous 
recombination system, as well as to kits. 
This methodology is available for 
licensing and is a highly versatile tool 
of direct use to drug discovery, pharma 
and research reagent companies as well 
as to companies working with industrial 
yeast strains.

In addition to licensing, the 
technology is available for further 
development through collaborative 
research with the inventors via a 
Cooperative Research and Development 
Agreement (CRADA).

Related technologies also available for 
licensing include: DHHS Ref. No. E– 
Associated Recombination Cloning (U.S. 
Patent No. 6,391,642 issued 21 May 
2002); and DHHS Ref. No. E–262–1984/ 
0–US–03, Process for Site Specific 
Mutagenesis Without Phenotypic 
Selection (U.S. Patent No. 4,873,192 

The Whey Acidic Protein (WAP) 
Promoter and Its Use to Express 
Therapeutic Proteins in the Milk of 
Transgenic Mammals

Lothar Hennighausen (NIDDK), Heiner 
Westphal (NIHCC), et al. U.S. Patent 
No. 6,727,405 issued 27 Apr 2004 
(DHHS Reference No. E–411–1987/0– 
US–03).

Licensing Contact: Susan Carson; 301/ 
435–5020; carsonsu@mail.nih.gov.

Transgenic animals can be engineered to 
express complex human proteins at 
high concentrations in milk. Protein 
replacement therapy is often the only 
treatment available for congenital 
diseases such as hemophilia or 
lysosomal storage disease, and the cost 
of treatment can be high with the 
therapeutic protein market estimated to 
reach more than $50 billion by 2010.

U.S. Patent No. 6,727,405 has recently 
been issued (expiry date 2021) to NIH 
scientists and their collaborators. This 
patent provides for a non-human 
mammal such as mouse, sheep, pig, goat 
and cow whose genome contains a DNA 
sequence comprising a milk serum 
protein (whey acidic protein) promoter 
linked to a heterologous gene sequence 
and secretory peptide, as well as 
methods for producing a secreted 
protein into the transgenic animal’s 
milk and claims directed to the DNA 
construct. The invention permits the 
production of any desired protein in an 
easily maintained, stable, mammalian 
biorreactor, which is capable not only of 
producing the desired protein in milk, 
but can also pass the ability to do so to 
its female offspring. Although other 
methods of obtaining recombinant 
protein products are available, these 
require inefficient, expensive 
purification of the protein from the 
blood or from cell culture media and 
there remains a need for an efficient and 
cost effective method for producing 
therapeutic proteins.

This WAP promoter platform 
technology provides a viable alternative 
to other milk protein promoters and is 
available for non-exclusive licensing.


Steven M. Ferguson, 
Director, Division of Technology Development 
and Transfer, Office of Technology Transfer, 
National Institutes of Health.

[FR Doc. 05–2364 Filed 2–7–05; 8:45 am]

BILLING CODE 4100–01–P

DEPARTMENT OF HEALTH AND 
HUMAN SERVICES

National Institutes of Health

Government-Owned Inventions; 
Availability for Licensing

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

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.

ADDRESSES: 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.

A3 Adenosine Receptor Agonists

Kenneth A. Jacobson et al. (NIDDK). 
60/608,823 filed 09 Sep 2004 (DHHS 
Licensing Contact: Marlene Shinn-Astor; 
(301) 435–4426; shinnm@mail.nih.gov.

Researchers have been pursuing 
compounds that activate or inhibit 
adenosine A3 receptors because these 
cell membrane proteins have a wide 
range of physiological and disease-
related effects and are thus considered 
to be promising drug targets. The 
adenosine A3 receptors are G-protein-
coupled receptors and are found mostly 
in brain, lung, liver, heart, kidney, and 
tests. When this receptor is activated 
moderately, a cytoprotective effect is 
observed, such as reducing damage to 
heart cells from lack of oxygen.

However, at high levels of stimulation 
they can cause cell death. Both agonists 
and antagonists are being tested for 
therapeutic potential, for example, 
treatment of cancer, heart conditions, 
neurological conditions, pain, asthma, 
inflammation and other immune 
implications.

Adenosine receptors have provided 
forte leads for pharmaceutical 
development, and there are currently a 
variety of adenosinergic compounds 
advancing toward clinical trials. 
Therapeutics which target the adenosine 
A3 receptors is now an emerging focus 
that the major pharmaceutical 
companies are developing. Smaller 
companies are also developing drugs 
that stem from proprietary technology 
targeting adenosine A3 receptors. These 
companies have products in clinical 
trials for colorectal cancer and 
rheumatoid arthritis.

This invention pertains to highly 
potent A3 adenosine receptor agonists, 
pharmaceutical compositions 
comprising such nucleosides, and a 
method of use of these nucleosides.

This research has been published, in 
part, in S. Tchilibon, B.V. Joshi, S.-K. 
Kim, H.T. Duong, Z.-G. Gao, and K.A. 
Jacobson, “N-methane adenosine 
derivatives as A3 receptor agonists,” J. 
Med. Chem., ASAP web release date 23 

In addition to licensing, the 
technology is available for further 
development through collaborative 
research with the inventors via a 
Cooperative Research and Development 
Agreement (CRADA).

Apparatus for Multifocal Deposition 
and Analysis

Bradford Wood, Alexander Gorbach, Ziv 
Neeman, Julia Hvisda (all of NIHCC), 
et al. U.S. Provisional Patent 
Application No. 60/403,875 filed 16 
Aug 2002 (DHHS Reference No. E– 
248–2001/0–US–01); International 
Application Number PCT/US03/ 
25575 filed 14 Aug 2003, which
includes a needle or catheter having a chromatic density. The apparatus for delivering an agent or for tissue characterization (nuclear tissue, such as optical spectroscopy for gathering information about a biological tissue, may deliver an agent to the tissue, extend through the deployment port. The needles may be solid or hollow and deliver an agent to the tissue, include a mechanism for gathering information about the tissue, or both. Optical spectroscopy in a needle-based system provides in vivo tissue characterization without removal of tissue for microscopic analysis, which may be helpful during surgery or image guided therapies to localize cancerous tissue.

Figure 1 is a schematic diagram of one embodiment of the apparatus in use. The distal end of the apparatus is shown within a neoplasm and the needles are in a deployed state.

Figure 2 is an enlarged, longitudinal section through the distal end of an embodiment of the apparatus, showing several extendable-retractable needles in a non-deployed, or retracted, state.

In addition to licensing, the technology is available for further development through collaborative research with the inventors via a Cooperative Research and Development Agreement (CRADA).

Dated: February 1, 2005.

Steven M. Ferguson,
Director, Division of Technology Development and Transfer, Office of Technology Transfer, National Institutes of Health.

[FR Doc. 05–2365 Filed 2–7–05; 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: National Institutes of Health, Public Health Service, DHHS.

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.

ADDRESSES: 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.

Monoclonal Antibody 90.12 Recognizes a Novel B Cell Surface Antigen Upregulated on Both Activated and Apoptotic Lymphocytes


Licensing Contact: Cristina Thalhammer-Reyero; 301/435–4507; thalhamc@mail.nih.gov.

Amino acid sequencing of the beginning of the protein suggests that it is a member of the S100 family of calcium binding proteins. The antibody is further described in “Characterization of a B cell surface antigen with homology to the S100 protein MRP8” by Shapiro MA, Fitzsimmons SP, Clark KJ, Biochem Biophys Res Commun. 1999 Sep 16;263(1):17–22 and “A novel activation induced lymphocyte surface antigen, 90.12, is also expressed on apoptotic cells” by Clark KJ, Monser M, Stein KE, Shapiro MA, Scand J Immunol. 2000 Feb;51(2):155–63.

Methods for Analyzing High Dimensional Data for Classifying, Diagnosing, Prognosticating, and/or Predicting Diseases and Other Biological States

Javed Khan and Paul S. Meltzer (NHGRI), et al.


Licensing Contact: Cristina Thalhammer-Reyero; 301/435–4507; thalhamc@mail.nih.gov.

This invention relates to a method of using supervised pattern recognition methods to classify, diagnose, predict, or prognosticate various diseases. The method includes