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They next designed an experimental strategy to ask if the hsp-ova fusion could be used to elicit a functional, and potentially therapeutic, immune response *in vivo*. They used the B16 melanoma cell line and a derivative, MO5, that was engineered to express ovalbumin. They immunized mice with hsp-ova, hsp, or ova and then infected them with B16 or MO5 tumor cells. After a period of time, they assayed the mice for tumor growth. In short, they found that the hsp-ova fusion could block tumor mass growth and significantly prolong survival.

The novel method of cellular immunization by the Young group, using hsp fusion proteins, could have broad applicability. Since CD8 CTL is known to play a major role in both viral and tumor immunity, these areas of study will most likely be investigated first. Perhaps by learning more about the mechanism of this unusual system, new ways of delivering antigens can be devised for human vaccination.

—Robert Sikorski and Richard Peters

References

1. H. Udono, D. L. Levey, P. K. Srivastava, *Proc. Natl. Acad. Sci. U.S.A.* **91**, 3077 (1994).

2. K. Suzue, X. Zhou, H. N. Eisen, R. A. Young, *ibid.* **94**, 13146 (1997).

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Pacified Passwords

Quick—How many Internet-related passwords do you currently have? Add up the

NET TIPS

journal sites you visit, the assorted free trial offers you have signed up for, the societies you belong to, and so on. Now, throw in some personal sites, such as for banking and shopping, and you see the problem. When you first register to a password-protected site, you usually create a login ID and password from scratch. The irony of password security is that the harder the password is to remember, the more secure you probably are. Also, by the time you arrive at a site, all of the easy to remember passwords are probably taken.

There are solutions, such as digital certificates, that get around the problem of having to use passwords, but it will take some time before (and if) these systems are adopted in a large scale. Digital certificates, for example, are just files that are stored by the browser.

They act in a digital “lock and key” mechanism that allows your browser and a remote server to authenticate each other. To learn more about digital certificates and cryptography, take a look at this online information site (www.rsa.com/rsalabs/newfaq/). In the meantime, you may want to look into special software that can greatly reduce the hassle of dealing with many passwords and IDs.

To find free and shareware (that is, cheap) software for password management, point your browser to the ZDNet software library (www.hotfiles.com) and search under “password.” Here, you can download and test as many products as you like.

Consider one randomly chosen software program called Password Manager (www.celcoserv.com/features.html) for Windows 95. In its simplest form, this software serves as a small database for all of your online user IDs and passwords. Access to the data is by a “super” password, so you just need to remember one item. If you want to get more sophisticated, the software will even generate random passwords for you, prompt you when to change an old password, or even create scripts that allow automated login.

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BIOLOGICALS AVAILABLE FROM THE NATIONAL CANCER INSTITUTE

The repository of the Biological Resources Branch, NCI, announces the availability of recombinant human cytokines and monoclonal antibodies against mouse and human antigens.

HUMAN CYTOKINES CURRENTLY AVAILABLE:

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The cytokines are aliquoted in 100 μ g amounts ($>10^6$ units) and are available to investigators with peer-reviewed support only (manufacturers' restrictions prohibit distribution of these materials to for-profit institutions or commercial establishments).



HeFi-1: Murine Anti-Human CD30 Monoclonal Antibody
B72.3: Murine Anti-Human TAG-72 Monoclonal Antibody
R24: Murine Anti-GD3 Monoclonal Antibody

OTHER MONOCLONAL ANTIBODIES CURRENTLY AVAILABLE:

3ZD: Murine anti-human IL-1 β
11B.11: Rat anti-mouse IL-4

The monoclonal antibodies are available to peer-reviewed investigators, for-profit institutions or commercial establishments. The 3ZD and the 11B.11 antibodies are available in either 5 or 20 mg vials. The B72.3, HeFi-1 and R24 antibodies are available only in 5 mg amounts.

Use of these materials is limited solely to *in vivo* and *in vitro* basic research studies and is **not** intended for administration to humans.

Investigators wishing to obtain any of these materials should send requests to:

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NCI-FCRDC
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Frederick, MD 21702-1201
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All requests should be accompanied by:

- (1) A brief paragraph outlining the purpose for which materials are to be used, (2) the amount desired, (3) description of investigator's peer-reviewed support. Recipients will be required to sign a Materials Transfer Agreement and to pay shipping and handling costs. Please allow 4 to 6 weeks for delivery.

NATIONAL CANCER INSTITUTE-FREDERICK CANCER RESEARCH & DEVELOPMENT CENTER

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To learn more about password software and cryptography, see the additional resources at the following URL: www.medsitenavigator.com/tips.

—Robert Sikorski and Richard Peters

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Patents Online

Whether you are a laboratory scientist, an industry executive, or an attorney, chances are that

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you will need to search patent and copyright databases or learn more about the application process for such intellectual property rights at one time or another. The World Wide Web offers several outstanding sites that are available free of charge. Below are three sites that should be part of the armamentarium of anyone interested in intellectual property.

IBM Patent Server
<http://patent.womplex.ibm.com/>

You can search, free of charge, more than 26 years of U.S. Patent and Trademark Office patent descriptions, representing over

2 million patents. The site, which is updated weekly, was developed by IBM's Almaden Research Center and uses IBM's own technology. Besides the depth of the database (24 gigabytes of patent text information), you can also view patent images from a 1.3 terabyte image repository. A complete copy of a patent can be ordered for a small fee. As an added bonus, there is even a gallery of obscure and bizarre patents (<http://patent.womplex.ibm.com/gallery.html>).

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The U.S. Patent and Trademark Office features a searchable database of the front page information from U.S. patents issued since 1 January 1976. Also available free of charge is the AIDS Patent Database: a database of the full text and images of AIDS-related patents issued by the U.S., Japanese, and European patent offices. In addition to searching for patents, the site offers forms to apply for patents, information on patent fees and review procedures, as well as legal information. Viewers should start with the site index to orient themselves to this very large Web site. Another section of the site that is very helpful is the International Intellectual Property Offices section (www.uspto.gov/web/menu/

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—Richard Peters and Robert Sikorski

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An, Z. et al. *Clinical and Experimental Metastasis*, 15, 184-195, 1997.
An, Z. et al. *Anticancer Research*, 16, 2546-2552, 1996.
Wang, X. et al. *Cancer Research*, 54, 4726-28, 1994.
Holzman, D. *Journal of the National Cancer Institute* 88, 396-397, 1996.
Hoffman, R., J. *Cellular biochem*, 56, 1-4, 1994.

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