Confocal microscope image of a section from an adult rat brain injected 4 weeks earlier with a human immunodeficiency virus–based vector expressing β-galactosidase (β-gal). The section was stained by immunofluorescence with antibodies to β-gal (green), the neuronal-specific marker NeuN (red), and the astrocytic protein GFAP (blue). A β-gal–expressing neuron (doubly stained, yellow) shows that the vector can transfer genes into nondividing cells, a desirable trait in gene therapy. Image width: ~240 micrometers. See page 263 and the related News story on page 195. [Image: U. Blomer and F. H. Gage]

**ARTICLE**

Protein Sorting by Transport Vesicles 227

J. E. Rothman and F. T. Wieland

**RESEARCH ARTICLE**

Global Observations of Oceanic Rossby Waves 234

D. B. Chelton and M. G. Schlax

**REPORTS**

Long-Term Effects of Acid Rain: 244

Response and Recovery of a Forest Ecosystem

G. E. Likens, C. T. Driscoll, D. C. Buso

History of Ancient Copper Smelting 246

Pollution During Roman and Medieval Times Recorded in Greenland Ice

S. Hong, J.-P. Candelier, C. C. Patterson, C. F. Boutron

Extraterrestrial Helium Trapped in 249

Fullerenes in the Sudbury Impact Structure

L. Becker, R. J. Poreda, J. L. Bada

Orientation-On-Demand Thin Films: 252

Curing of Liquid Crystalline Networks in ac Electric Fields

H. Körner, A. Shiotai, T. J. Bunning, C. K. Ober

Imaging and Time-Resolved Spectroscopy 255

of Single Molecules at an Interface

J. J. Macklin, J. K. Trautman, T. D. Harris, L. E. Brus

Positional Cloning of the Werner's Syndrome Gene 258


**TECHNICAL COMMENTS**

In Vivo Gene Delivery and Stable Transduction of Nondividing Cells by a Lentiviral Vector 263


Accurate Processing of a Eukaryotic Precursor Ribosomal RNA by Ribonuclease MRP in Vitro 268

Z. Lygerou, C. Allmang, D. Tollervey, B. Séraphin

Role of Reticular Activation in the 271

Modulation of Intracortical Synchronization

M. H. J. Munk, P. R. Roelfsma, P. König, A. K. Engel, W. Singer

Short-Term Plasticity of a 274

Thalamocortical Pathway Dynamically Modulated by Behavioral State

M. A. Castro-Alamancos and B. W. Connors

Rho1p, a Yeast Protein at the Interface 277

Between Cell Polarization and Morphogenesis


Identification of Yeast Rho1p GTPase 279

as a Regulatory Subunit of 1,3-β-Glucan Synthase


**THE AAAS AND SCIENCE WILL BE MOVING THEIR HEADQUARTERS ON 15 APRIL 1996 TO 1200 NEW YORK AVE., NW WASHINGTON, DC 20005**

**Indicates accompanying feature**

SCIENCE (ISSN 0036-8075) is published weekly on Friday, except the last week in December, by the American Association for the Advancement of Science, 1333 H Street, NW, Washington, DC 20005. Second-class postage (publication No. 484460) paid at Washington, DC, and additional mailing offices. Copyright © 1996 by the American Association for the Advancement of Science. The title SCIENCE is a registered trademark of the AAAS Domestic individual membership and subscription (51 issues): $102 ($55 allocated to subscription). Domestic institutional subscription (51 issues): $250. Foreign postage extra: Mexico, Caribbean (surface mail) $55; other countries (air assisted delivery) $90. First class, airmail, student, and emeritus rates on request. Canadian rates with GST available upon request, GST #1254 88 122. Printed in the U.S.A.

Change of address: allow 4 weeks, giving old and new addresses and 8-digit account number. Postmaster: Send change of address to Science, P.O. Box 1811, Danbury, CT 06813–1811. Single copy sales: $7.00 per issue prepaid includes surface postage; bulk rates on request. Authorization to photocopy material for internal or personal use under circumstances not falling within the fair use provisions of the Copyright Act is granted by AAAS to libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that $4.00 per article is paid directly to CCC, 222 Rosewood Drive, Danvers, MA 01923. The identification code for Science is 0036-8075/83/$4.00. Science is indexed in the Reader’s Guide to Periodical Literature and in several specialized indexes.