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COVER

Maturation of human antibodies from germline recombinant (gray ribbon structure), along four lineages (orange, yellow, green, and blue), into potent neutralizers of HIV-1. A mature antibody variable domain is shown binding its target, HIV-1 envelope glycoprotein gp120 (red ribbon structure). Deep sequencing and structural bioinformatics of the antibody repertoires of HIV-infected individuals uncover the genetic record for the development of broadly neutralizing HIV-1 immunity. See page 1593.

Image: Jonathan Stuckey, Vaccine Research Center, National Institute of Allergy and Infectious Diseases/NIH

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Yeast can compensate for the loss of RNA interference by becoming killer yeast through the acquisition of a killer virus.

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- 1593 **Focused Evolution of HIV-1 Neutralizing Antibodies Revealed by Structures and Deep Sequencing**
X. Wu et al.
Broadly neutralizing antibodies to HIV with similar specificities can be found in multiple HIV-infected individuals.
>> *Perspective p. 1589; Report p. 1633*
- 1602 **Kepler-16: A Transiting Circumbinary Planet**
L. R. Doyle et al.
An exoplanet has been observed, comparable in size and mass to Saturn, that orbits a pair of stars.
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- 1609 **Primary Alcohols from Terminal Olefins: Formal Anti-Markovnikov Hydration via Triple Relay Catalysis**
G. Dong et al.
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- 1613 **Selective Catalytic C-H Alkylation of Alkenes with Alcohols**
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- 1616 **Soil Nitrite as a Source of Atmospheric HONO and OH Radicals**
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- 1637 **Yeast Rrn7 and Human TAF1B Are TFIIIB-Related RNA Polymerase I General Transcription Factors**
B. A. Knutson and S. Hahn

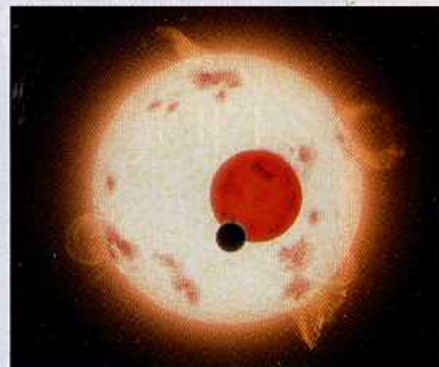
- 1640 **TAF1B Is a TFIIIB-Like Component of the Basal Transcription Machinery for RNA Polymerase I**
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- 1642 **Role for the Membrane Receptor Guanylyl Cyclase-C in Attention Deficiency and Hyperactive Behavior**
R. Gong et al.
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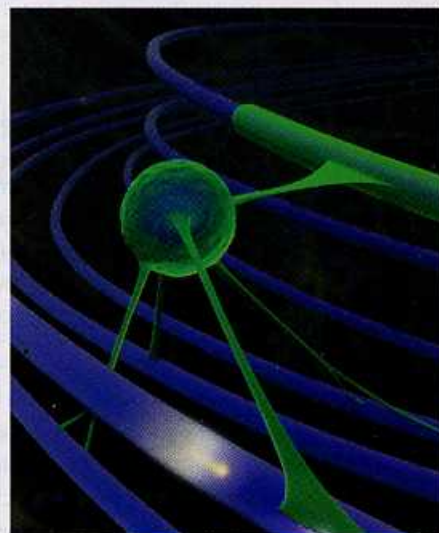
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