nature

5

7

9

33

65

Supplement to Nature 29 May 1997

Volume 387 | issue no. 6632S





Nature gratefully acknowledges the sponsorship from the European Commission, DG XII - Life Sciences, without which this supplement and its associated CD-ROM could not have been produced.



Porters South, 4 Crinan St, London N1 9XW, UK Tel 44 (0) 171 833 4000 Fax 44 (0) 171 843 4596/7 e-mail: nature@nature.com http://www.nature.com



introduction

The Yeast Genome Directory A. Goffeau et al

Overview of the yeast genome *H. W. Mewes* et al

maps

Chromosome maps	
H. W. Mewes et al	
Chart of duplications	

H. W. Mewes	et al	
Gazetteer H. W. Mewes	et al	35

Genetic and physical maps *J. M. Cherry* et al

letters

The nucleotide sequence of Saccharomyces		
<i>cerevisiae</i> chromosome IV <i>C.Jaca</i> et al	75	
o budy de ui		

The nucleotide sequence of Saccharomycescerevisiae chromosome V78F. S. Dietrich et al

The nucleotide sequence of Saccharomycescerevisiae chromosome VII8181H. Tettelin et al

The nucleotide sequence of Saccharomycescerevisiae chromosome IX84C. Churcher et al84

The nucleotide sequence of Saccharomycescerevisiae chromosome XII87M. Johnston et al87

The nucleotide sequence of Saccharomycescerevisiae chromosome XIII90S. Bowman et al90

The nucleotide sequence of Saccharomycescerevisiae chromosome XIV and itsevolutionary implications93P. Philippsen et al

The nucleotide sequence of Saccharomycescerevisiaechromosome XV98B. Dujon et al98

The nucleotide sequence of Saccharomycescerevisiae chromosome XVI103H. Bussey et al

Residents of a particular city notoriously have never visited most sights shown to tourists. In the same way, the complete genomic sequence of the brewer's yeast, *Saccharomyces cerevisiae*, has now been available for over a year, proving its usefulness to molecular biologists in a hundred quiet ways, without attracting the concerted attention that is its due. This *Directory* is intended to remedy that situation, by presenting papers on all the hitherto undescribed chromosomal sequences alongside an overview of the entire genomic sequence.

Like many a monument ignored by locals, familiarity has obscured what an achievement it represents. For one thing, it is still almost three times as large as any other genome sequenced so far. Then, too, this size necessitated a unique international collaboration which will surely inspire related projects in the future. Most importantly, it represents the first complete sequence of a eukaryotic genome, the last of the three superkingdoms of life to have a fully sequenced representative.

As such, it will be a rich mine of information for everyone concerned with all kinds of eukaryotic genomes, up to and including those of human beings. The opportunity this represents is equalled only by the challenge: dauntingly, of the 5,800 open reading frames in the sequence, the function of 45% cannot even be guessed. For now, we can only be grateful to the European Commission (DG XII – Life Sciences) for initiating and supporting, since 1989, the international project whose success has allowed *Nature* to present a unified account of this vital resource, and look forward to the flood of information that its study will surely release.

Editor, Nature: Philip Campbell Supplement Editors: Nicholas Short, Carina Dennis Barbara Cohen Design: Majo Xeridat, Nicola Barker Production: Peter Wrobel, Nick Haines, Karen Whittock

Nature[®] (ISSN 0028-0836) is published weekly on Thursday, except the last week in December, by Macmillan Magazines Ltd (Porters South, 4 Crinan Street, London N1 9XW). Registered as a newspaper at the British Post Office. Arnual subscription for USA and Canada US\$495 (institutional/corporate), US\$145 (individual making personal payment). Canada residents please add 7% GST (No. 140911595). US and Canadian orders to: Nature, Subscription Dgt, P. O. Box 5055, Brentwood, TN 37024-5055, USA. Other orders to Nature, Brunel Road, Basingstoke, Hants RG21 2XS, UK. Periodical postage paid at New York, NY 10010-1707, and additional mailing offices. Authorization to Photocopy material for internal or personal use, or internal or personal use of specific clients, is granted by Nature to libraries and others registered with the Oxpyright Clearance Center (OCC) Transactional Reporting Service, provided the base fee of \$12.00 an article (or \$2.00 a page) is paid direct to CCC, 222 Rosewood Drive, Darwers, N& 01923, USA. Identification code for Nature: 028-0836/97 \$12.00+82.00. US Postmasters send address changes to: Nature, 345 Park Avenue South, New York NY 10010-1707, US. Published in Japan by Nature Japan K.K., Shin-Mitsuke Bldg. 36 Ichigaya