Recombinant DNA
Edited by John Abelson and Eleanor Butz

EDITORIAL
Recombinant DNA Revisited: M. Singer

ARTICLES
A Revolution in Biology: J. Abelson

DNA Sequence Data Analysis
Steps Toward Computer Analysis of Nucleotide Sequences:
T. R. Gingeras and R. J. Roberts

Structure of the Genes That Do Not Rearrange
Structure and in vitro Transcription of Human Globin Genes:
N. J. Proudfoot, M. H. M. Shander, J. L. Manley, M. L. Gefter,
T. Maniatis

Mouse Globin System: A Functional and Evolutionary Analysis: P. Leder,
J. N. Hansen, D. Konkel, A. Leder, Y. Nishioke, C. Talkington

At Least Three Human Type α Interferons: Structure of α2:
M. Streuli, S. Nagata, C. Weissman

Structure of the Genes That Rearrange in Development
Mapping of Heavy Chain Genes for Mouse Immunoglobulins M and D:

Mouse Immunoglobulin D: Messenger RNA and Genomic DNA Sequences:
P. W. Tucker, C.-P. Liu, J. F. Mushinski, F. R. Blattner

DNA Sequences Mediating Class Switching in α-Immunoglobulins:
M. M. Davis, S. K. Kim, L. E. Hood

Immunoglobulin Gene Rearrangement in Immature B Cells: R. Maki,
J. Kearney, C. Paige, S. Tonegawa

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Genes Whose Mission Is to Jump

Phase Variation: Evolution of a Controlling Element: M. Simon,
J. Zieg, M. Silverman, G. Mandel, R. Doolittle .................. 1370

The Origins of Gene Instability in Yeast: G. S. Roeder, P. J. Farabaugh,
D. T. Chaleff, G. R. Fink .................................................. 1375

Recombination of Dispersed Repeated DNA Sequences in Yeast:
S. Scherer and R. W. Davis ........................................... 1380

Tumor DNA Structure in Plant Cells Transformed by A. tumefaciens:
P. Zambrayski, M. Holsters, K. Kruger, A. Depicker, J. Schell,
M. Van Montagu, H. M. Goodman ....................................... 1385

Engineered Mutagenesis

Isolation of Mutants of an Animal Virus in Bacteria: K. W. C. Peden,
J. M. Pipas, S. Pearson-White, D. Nathans .......................... 1392

Directed Deletion of a Yeast Transfer RNA Intervening Sequence:
R. B. Wallace, P. F. Johnson, S. Tanaka, M. Schöld, K. Itakura,
J. Abelson ................................................................. 1396

Chemical DNA Synthesis and Recombinant DNA Studies:
K. Itakura and A. D. Riggs ................................................. 1401

Expression of Cloned Genes in New Environment

Promoter Sequences of Eukaryotic Protein-Coding Genes: J. Corden,
B. Wasylyk, A. Buchwalder, P. Sassone-Corsi, C. Redinger, P. Chambon 1406

Altering Genotype and Phenotype by DNA-Mediated Gene Transfer:
A. Pellicer, D. Robins, B. Wold, R. Sweet, J. Jackson, I. Lowy,
J. M. Roberts, G. K. Sim, S. Silverstein, R. Axel .............................................................. 1414

Expression of a Bacterial Gene in Mammalian Cells:
R. C. Mulligan and P. Berg ............................................. 1422

A Technique for Expressing Eukaryotic Genes in Bacteria: L. Guarente,
T. M. Roberts, M. Ptashne ............................................. 1428

Effect of Interferon—al from E. coli on Some Cell Functions:
M. G. Masucci, R. Szegedi, E. Klein, G. Klein, J. Gruetz,
L. Montagner, H. Taira, A. Hall, S. Nagata, C. Weissmann 1431

COVER

Transfer of DNA from bacteria to plant cells and regeneration of a whole plant from tumor tissue. A shoot from a cloned teratoma tumor of Havana 425 tobacco induced by the soil bacterium Agrobacterium tumefaciens was grafted onto a Turkish variety host. The flowering shoot and teratoma which developed at the graft union both contained genetic information derived from Agrobacterium. Also shown is a diagram of possible models for the transfer of tumor-inducing (Ti) plasmid DNA from Agrobacterium to plant DNA. See page 1383. [Andrew Binns, Rockefeller University, New York City]