



METHODS•AND•APPLICATIONS

Editors

David Bentley
Sanger Centre
Richard Gibbs

Baylor College of Medicine
Eric Green

National Center for Human Genome Research, NIH
Richard Myers

Stanford University School of Medicine

Editorial Board

Rakesh Anand
Zeneca Pharmaceuticals

Johannes Bos
University of Utrecht
Anne Bowcock

University of Texas Southwestern Medical Center

Jeff Chamberlain
University of Michigan Medical School

Nicholas Dracopoli
National Center for Human Genome Research, NIH
Joe Ecker

University of Pennsylvania
Ray Fenwick
Biodale Laboratories

Kenshi Hayashi

National Cancer Center Research Institute, Tokyo

Bernhard Horsthemke
University of Essen

Pieter de Jong

Roswell Park Cancer Institute
David Kemp

Menzies School of Health Research
Mary-Claire King

University of California, Berkeley
Ulf Landegren

University of Uppsala Medical Center
Doug Marchuk

Duke University Medical School
Chris Mathew

UMDS Guy's & St. Thomas' Medical and Dental School
David Nelson

Baylor College of Medicine
Debbie Nickerson

University of Washington School of Medicine
Svante Pääbo

University of Munich

Lena Peltonen

University of Helsinki
Eric Spitzer

SUNY at Stony Brook

Lap-Chee Tsui

Hospital for Sick Children, Toronto
Rick Wilson

Washington University School of Medicine
Steven Wolinsky

Northwestern University School of Medicine
Maria Zapp

University of Massachusetts Medical Center

Managing Editor

Judy Cuddihy
Cold Spring Harbor Laboratory Press

Contents

February, 1995
Volume 4, Number 4

REVIEW

199 **Advances in PCR-based Detection of Mycoplasmas Contaminating Cell Cultures**
Georges Rawadi and Olivier Dussurget

RESEARCH

209 **Catch-linker + PCR Labeling: A Simple Method to Generate Fluorescence *In Situ* Hybridization Probes from Yeast Artificial Chromosomes**
Yoshiro Shibasaki, John C. Maule, Rebecca S. Devon, Euan M. Slorach, John R. Gosden, David J. Porteous, and Anthony J. Brookes

212 **Background-minimized Cassette Mutagenesis by PCR Using Cassette-specific Selection Markers: A Useful General Approach for Studying Structure-Function Relationships of Multisubstrate Enzymes**
Kumud Majumder, Farkad A. Fattah, Angamuthu Selvapandian, and Raj K. Bhatnagar

219 **An Evaluation of Competitor Type and Size for Use in the Determination of mRNA by Competitive PCR**
R.K. McCulloch, C.S. Choong, and D.M. Hurley

227 **Metastable Single-strand DNA Conformational Polymorphism Analysis Results in Enhanced Polymorphism Detection**
Takao Kasuga, Jing Cheng, and Keith R. Mitchelson

234 **Quantitative Detection of Reverse Transcriptase-PCR Products by Means of a Novel and Sensitive DNA Stain**
Christian Schneeberger, Paul Speiser, Fritz Kury, and Robert Zeillinger

TECHNICAL TIPS

239 PCR with Deoxyinosine-containing Primers Using DNA Polymerases with Proofreading Activity
Hiroshi Fujiwara, Keiko Fujiwara, and Ken Hashimoto

241 Identification of the Species Origin of Highly Processed Meat Products by Mitochondrial DNA Sequences
Michael Unseld, Birgit Beyermann, Petra Brandt, and Rudolf Hiesel

244 **Product News**

(continued)

Published by Cold Spring Harbor Laboratory Press.
Sponsored by The Perkin-Elmer Corporation.

Editorial Staff

Nadine Dumser, Technical Editor
Valerie Nicolette, Production Editor
Doris Lawrence, Secretary
Jim Suddaby, Design

Advertising

Nancy Kuhle

MANUAL SUPPLEMENT

247 **Getting Started: A PCR Primer**
248 *Contents*