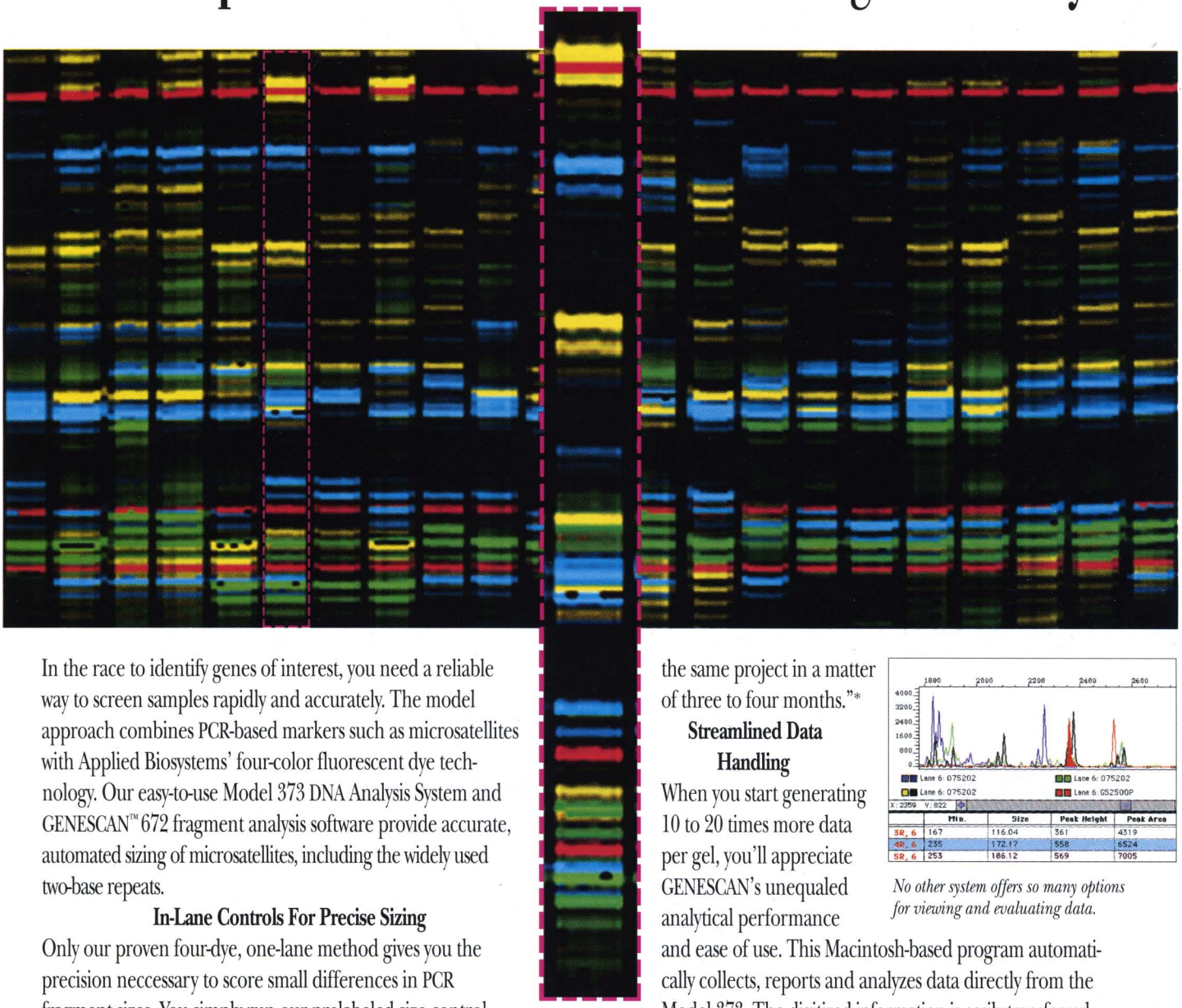
PCR Sizing

The Complete Solution For Automated Fragment Analysis



In the race to identify genes of interest, you need a reliable way to screen samples rapidly and accurately. The model approach combines PCR-based markers such as microsatellites with Applied Biosystems' four-color fluorescent dye technology. Our easy-to-use Model 373 DNA Analysis System and GENESCAN™ 672 fragment analysis software provide accurate, automated sizing of microsatellites, including the widely used two-base repeats.

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Only our proven four-dye, one-lane method gives you the precision neccessary to score small differences in PCR fragment sizes. You simply run our prelabeled size control in the same lanes with samples. Our GENESCAN software compares sample bands against this in-lane control to size PCR fragments precisely. This in-lane standard automatically controls for lane-to-lane and gel-to-gel variation.

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No other system offers so many options for viewing and evaluating data.

Our versatile technology also brings unsurpassed precision to fragment quantitation and sequencing. At Applied Biosystems, we're committed to providing fundamental technologies to support a full spectrum of applications for genetic analysis–now and in the future.

To receive literature on the Model 373, GENESCAN, and linkage analysis applications, call Applied Biosystems at:
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*Betsy Nanthakumar, Director, DNA Analysis Facility, Johns Hopkins University.

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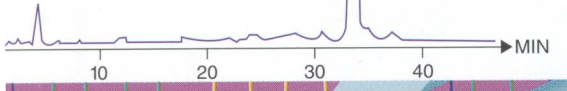

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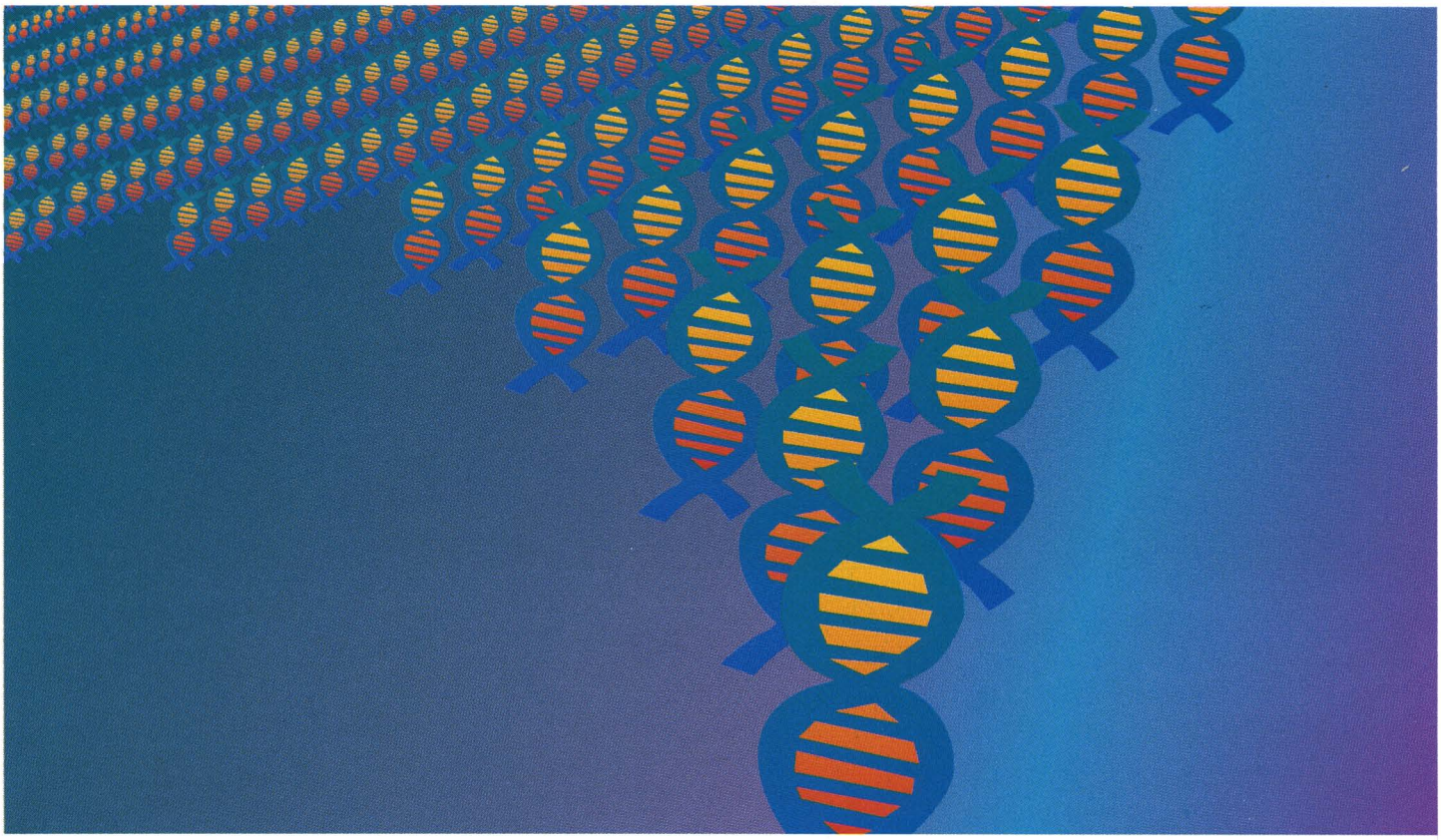

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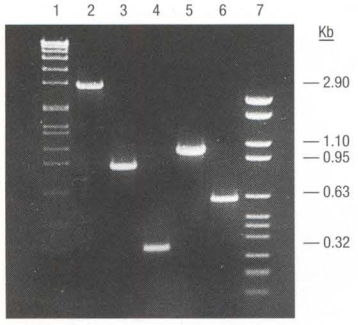

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Spectrolinker for elimination of PCR contamination

The user-friendly Spectrolinker Model XL-1000 is a microprocessor-controlled, short-wave UV irradiation chamber that allows precise delivery of preset energy dosages between application stages in the PCR process. The UV irradiation denatures contaminated DNA, thereby improving the signal to noise ratio inherent to the PCR process. The Model XL-1000 covalently binds nucleic-acid samples to membranes in under 30 sec. The Spectrolinker's other uses include nicking ethidium-bromide stained DNA in agarose gels, creating cleavage-inhibiting thymine dimers for gene mapping, UV-intensity monitoring, and UV sterilization. The XL-1000's photo sensor provides accurate UV monitoring, even as the tubes age. Five 8-watt 254-nm tubes are provided.

Contact: Spectronic Corporation, 956 Brush Hollow Road, Dept. 1008, Westbury, New York 11590. (800)274-8888; FAX (516)333-4859. Reader Service No. 335.

New PCR Core kit

Simplify specific, high-yield PCR with Boehringer Mannheim's new PCR Core kit. This kit is function tested in two amplification reactions with λDNA templates (including a 7 kb fragment). Maximum specificity result's from the kit's Taq DNA polymerase, which is subjected to a unique assay ensuring the absence of contaminating DNA fragments. This enzyme is tested for specific amplification of a single-copy gene in human genomic DNA. The kit also contains a premixed nucleotide solution and two reaction buffers—one containing $MgCl_2$ and one lacking $MgCl_2$, which can be used with the supplied $MgCl_2$ solution to optimize Mg^{+2} concentrations for maximum specificity and yield.

Contact: Boehringer Mannheim Corporation, 9115 Hague Road, Indianapolis, Indiana. (800)262-1640. Reader Service No. 336.

MicroAmp full plate cover

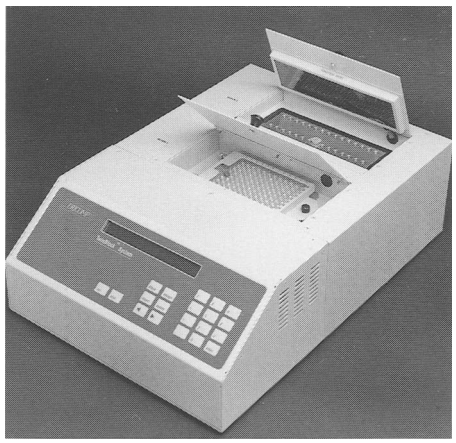
Perkin-Elmer's new MicroAmp full plate cover for the GeneAmp PCR System 9600 covers and seals 96 MicroAmp reaction tubes held in the MicroAmp tray/retainer to significantly decrease process time and increase sample throughput. The MicroAmp full plate cover is designed specifically for high-volume researchers who use 96 samples for each amplification run and who want the greatest ease of sealing the tubes during amplification. The MicroAmp full plate cover does not require an oil overlay and is fully compatible with hot start experiments using AmpliWax PCR Gems 100's.

Contact: The Perkin-Elmer Corporation, 761 Main Avenue, Norwalk, Connecticut 06859-0012. (800)762-4000. Reader Service No. 337.

The 4 Format TwinBlock temperature cyclers from Ericomp

Ericomp's popular Easycycler series Temperature Cyclers now include the 4 Format TwinBlock System. On this versatile instrument researchers can run experiments with microtiter plates, 0.2-ml tubes, 0.5-ml tubes, or slides without the need for interchangeable blocks or accessory parts. Ericomp Temperature Cyclers are reliable and durable and are backed by a 3-year warranty. They have precise across-the-block temperature control and powerful two-machines-in-one operations (TwinBlock and PowerBlock). Now, the workhorse TwinBlocks are available with a block configuration that offers unparalelled flexibility with optimal cost and efficiency.

Contact: Ericomp, Inc., 6044 Cornerstone Court West, Suite E, San Diego, California 92121. (800)541-8471; (619) 457-1888; FAX (619)457-2937. Reader Service No. 338.



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New PCR and manual pipettes from ICN

ICN Biomedicals, Inc. has several choices of easy-to-use pipettes that help make lab work more comfortable, streamlined, and accurate. The Titertek single and multichannel manual pipettes come in both fixed (1–1000 μl) and variable volumes (0.5–1000 μl) for a variety of laboratory uses and applications. The multichannel pipettes can be easily cleaned and recalibrated in the laboratory to ensure accuracy and precision. The Titertek PCR pipette is designed specifically for the application with an easy-to-read digital display, a special grip for convenience, and a safe tip ejector.

Contact: ICN Biomedicals, Inc., 3300 Hyland Avenue, Costa Mesa, California 92626. (714)545-0113; FAX (714)641-7275. Reader Service No. 339.

Genetic Thermal Cycler

A microprocessor-controlled instrument designed for DNA and gene amplification, enzyme digestion, enzyme ligation DNA denaturation, and other procedures that require precise temperature cycling of biological material is now available from GL Applied Research, Inc. The Model GTC-2 Genetic Thermal Cycler is capable of performing both 2-step and 3-step DNA amplification and can be programmed with up to 99 different protocols, each of which can have up to 27 distinct temperature steps. The GTC-2 features an easy-to-program menu-driven control panel, a microprocessor-based ramping control to raise, lower, or hold setpoint temperatures from 0 to 99°C with ±0.5°C uniformity over the entire temperature range. The unit is capable of up to 1°C per sec heating and 0.7°C per sec cooling. Temperature information is displayed on an alphanumeric readout and also generates both analog and digital signals. The GTC-2 accomodates up to 48 standard 0.5-ml microcentrifuge tubes in a precision-machined aluminum sample block. The block's conical-shaped wells ensure optimum heat transfer without the use of mineral oil or glycerol. A temperature probe shaped to fit within a sample well can be used to monitor sample temperature during the amplification process.

Contact: GL Applied Research, Inc., P.O. Box 187, Grayslake, Illinois 60030. (708)223-2220; FAX (708)223-2287. Reader Service No. 340.

Easy detection of mycoplasma infection

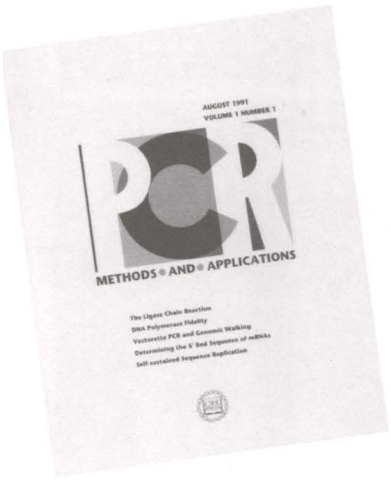
Stratagene has developed the Mycoplasma PCR Primer Set, a simple nonradioactive method to detect mycoplasma infection in tissue culture cells. This PCR-based method allows highly sensitive detection of mycoplasma in as little as 4 hr. The PCR Primer Set is easy to use and requires little template preparation and test set up. There is no need to carry or maintain a special indicator cell line or to use radioactivity or a fluorescent microscope. Included with the PCR primers are both positive control and competitive internal control templates. The positive control is noninfectious, genomic mycoplasma DNA, which is used for test result comparison. The internal control confirms polymerase activity. The Mycoplasma PCR Primer Set comes complete with enough PCR primers, internal control template, and StrataClean resin for 50 determinations, and positive control template for 10 determinations.

Contact: Stratagene, 11011 North Torrey Pines Road, la Jolla California 92037. (800)424-5444; (619)535-5400. Reader Service No. 341.

GeneAmp Thin-Walled Reaction Tubes

Perkin-Elmer's new GeneAmp Thin-Walled Reaction Tubes with Flat Cap are 0.5-ml tubes that allow users to write directly on the flat cap, making identification of samples fast and easy. Designed for use with the company's DNA Thermal Cycler and DNA Thermal Cycler 480, the new GeneAmp Thin-Walled Reaction Tubes with Flat Cap permit rapid transfer of heat. The GeneAmp Thin-Walled Reaction Tubes with Flat Cap are manufactured to the same engineering specifications as the original 0.5-ml Thin-Walled GeneAmp Reaction Tubes, but no longer have the domed cap necessary for use in the GeneAmp PCR System 9600.

Contact: The Perkin-Elmer Corporation, 761 Main Avenue, Norwalk, Connecticut 06859-0012. (800)762-4000. Reader Service No. 342.



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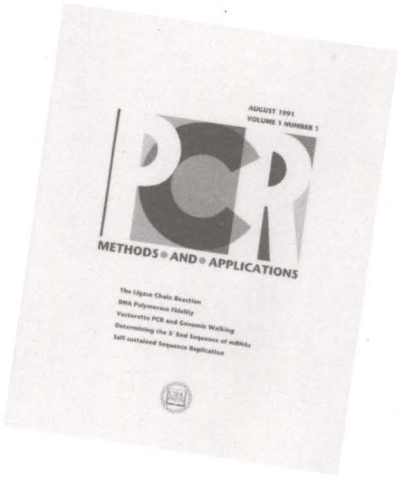

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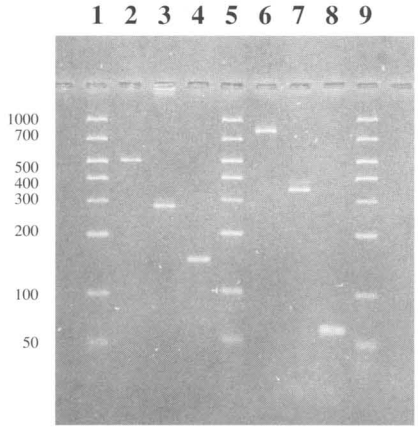

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