

# Turning the heat on PCR

Thermocycling and PCR are the themes this week.

## Auto-Lid

### Applied Biosystems

[www.appliedbiosystems.com](http://www.appliedbiosystems.com)

#### Cover-up for System 9700 thermal cyclers

The Auto-Lid dual 384-well module for the GeneAMP PCR System 9700 thermal cycler is driven by a stepper motor that provides precise movement forwards and backwards. A plate ejection feature allows access by a robot arm and reduces the need for user intervention. The Auto-Lid can be purchased as an option with System 9700, or as a separate model to attach to an existing system. Applications include high-throughput PCR and cycle sequencing.



Auto-Lid, for high-throughput PCR.

## RiboAmp

### Arcturus

[www.arctur.com](http://www.arctur.com)

#### RNA amplification kit

The RiboAmp kit features a new linear amplification method designed to improve reliability. Reagents, nucleic acid purification devices and a protocol optimized to produce microgram quantities of RNA ready for labelling and hybridization onto microarrays are included with the kit. RiboAmp will amplify mRNA of all abundance classes, including low-abundance mRNA. Each kit contains supplies for 10 amplifications, and the amplified material can be utilized in multiple experiments. The kit can be used independently or as part of Arcturus's integrated systems for Microgenomics centred around its PixCell II Laser Capture Microdissection System.

## Microfuge PCR rotor

### Beckman Coulter

[www.beckmancoulter.com](http://www.beckmancoulter.com)

#### Capacity and power for DNA applications

The F12 × 8.2 PCR tube strip rotor for the Microfuge 22R microcentrifuge minimizes condensation from PCR reactions by providing quick spins and can be used for post-reaction clean-up. Up to 12 strips of eight 200 µl



Microfuge 22R: quick spins for PCR.

## Amplification tape

### Nalge Nunc

[www.nalgenunc.com](http://www.nalgenunc.com)

#### Put a damper on it

Designed for NUNC 96- and 384-well amplification plates, this sealing tape can be used in temperatures ranging from -80 °C through to thermal cycling. It is certified RNase/DNase-free. Nalge Nunc claims that the tape provides a highly effective seal, preventing evaporation and eliminating well-to-well cross-contamination. The company's range of sealing tapes can be used with microwell plates in PCR, general assays, genomics, compound and library storage, bioanalytical assays, high-throughput screening and drug discovery applications.

## MiracleHyb

### Stratagene

[www.stratagene.com](http://www.stratagene.com)

#### A clear message for northern analysis

MiracleHyb nucleic acid hybridization solution is said to yield high sensitivity and lower background, making it suitable for use in northern analysis when sensitive detection of low-abundance messages is a priority. The solution comes ready to use. It may be stored at room temperature and incorporated into existing protocols. A probe preparation buffer is included. For a limited time, Stratagene is offering a free 25 ml sample.

## PROTEINscript-PRO

### Ambion

[www.ambion.com](http://www.ambion.com)

#### High-yield translation kit

The PROTEINscript-PRO kit is designed for coupled *in vitro* transcription and translation using a highly active *E. coli* S30 extract. The format is a single-step reaction that can translate

both prokaryotic and eukaryotic sequences in 30 minutes. Any DNA template can be used, including PCR fragments. The prokaryotic lysate is said to produce higher yields than reticulocyte lysate for most sequences. The kits are available in several formats, including 25-reaction, single-tube kits using SP6, T7 or T3 polymerases and a 96-well high-throughput format using either SP6 or T7 polymerases.

## SuperScript

### Invitrogen

[www.invitrogen.com](http://www.invitrogen.com)

#### Single-tube RT-PCR system

This system combines SuperScript II reverse transcriptase with Platinum *Taq* DNA polymerase to provide RT-PCR in a single-tube reaction. Reduced RNase H activity in SuperScript II RT works with Platinum antibody-mediated, hot-start technology to provide high yield and sensitivity to 0.1 pg in gene expression analysis.

## SuperSignal RPA III

### Pierce

[www.piercenet.com](http://www.piercenet.com)

#### Chemiluminescent detection kit

Pierce has collaborated with Ambion to produce this kit, which combines Pierce's SuperSignal chemiluminescent detection technology with Ambion's ribonuclease protection assay (RPA) to produce a non-isotopic RPA kit that provides sub-picogram sensitivity results in less time than it takes to run a traditional isotopic RPA. Exposures can be made in minutes and the probes remain stable for years, with no need to run probe purifications. The assay uses a single-tube reaction that requires no phenol extraction or proteinase K digestion.

## HM-4000 Multidizer

### UVP

[www.uvp.com](http://www.uvp.com)

#### Shake, rock, roll and rotate

The HM-4000 Multidizer hybridization oven features two independently operated chambers to accommodate hybridization and blotting procedures requiring different settings. The lower chamber is equipped with temperature controls, variable rotation speed settings and multiple-size bottle capacity with the use of a bottle carousel. The carousel can be removed for a rock-and-roll action using an optional rocker plate. The upper chamber has roller action for operating the shaker tray or an optional orbital tray. Applications include cDNA library screening, primer synthesis and nucleic acid hybridization.

*These notes are compiled in the Nature office from information provided by the manufacturers.*