

# **GENOMICS**



## Oligo processor

Hybaid's (Teddington, UK) Oligo Pro is a benchtop instrument that automatically cleaves, deprotects, and concentrates oligonucleotides following synthesis. Oligo Pro can hold and process up to 12 samples simultaneously and works in conjunction with a variety of DNA synthesizers. Cleavage and deprotection can be carried out at two user-definable temperatures. Incubation and concentration times are also programmable.

Tel: +44 181 614 1000 Fax: +44 181 977 0170 RSN 965



# **Cloning system**

Invitrogen's (Leek, the Netherlands) new Zero Background PLUS cloning kit includes pZErO vectors that use either Zeocin or kanamycin resistance for positive selection of inserts via disruption of a highly lethal gene, thus avoiding time-consuming vector dephosphorylation and blue/white color screening. The kits also include 21 individual

50 μl aliquots of One Shot TOP10' competent cells (at least 1x10<sup>8</sup> cfu/μg) for maximum transformation efficiencies.

Tel: +31 594 515 175 Fax: +31 594 515 312 RSN 966

### Genomic libraries

MoBiTec's (Göttingen, Germany) genomic libraries have a lambda PS system with an automatic plasmid subcloning mechanism for large inserts (up to 20 kb) to facilitate screening and subsequent characterization of clones. Positive clones are transferred into a Cre recombinase-expressing *E. coli* strain where they can be easily propagated and characterized. There are five vertebrate and three nonvertebrate libraries in the range, including human, mouse, rat, yeast, and *C. elegans*.

Tel: +49 55 13 71 06 2 Fax: +49 55 13 49 87 RSN 967



#### **DNA** extraction kits

The Puregene genomic DNA extraction kit from Flowgen (Lichfield, UK) does not use phenol or chloroform, producing high yields of DNA using salt and alcohol precipitation. Kits include a lytic enzyme for lysing the cells with its own lysis solution, an RNAse A solution, a protein precipitation solution, and a DNA hydration solution. DNA extracted using Pureclean needs no additional purification and is suitable for sequencing and PCR.

Tel: +44 1543 483 054 Fax: +44 1543 483 055 RSN 968

## **RNA PCR kit**

PE Applied Biosystems (Foster City, CA) introduces the GeneAmp XL RNA PCR Kit for the analysis of gene expression, RNA viruses, and cDNAs. The kit is optimized to produce long reverse transcription PCR products. It includes r*Tth* DNA Polymerase, XL enzyme, and XL RNA buffer system, all providing robust, specific, greater than 3 kb RT PCR products from RNA templates. The polymerase also functions

as a thermostable reverse transcriptase that allows for high temperature (60°C) cDNA synthesis during RNA PCR. With buffer modifications, this same enzyme then functions as a DNA polymerase.

Tel: + 1 800 345 5224 Fax: +1 415 572 2743 RSN 969



### **DNA Analyzer**

The DNAlyser from Ingeny (Leiden, the Netherlands) performs PAGE and denaturing gradient separations (DGGE) on single 2D gels. Buffer levels in the different buffer tanks are controlled using fluid sensors and voltage is automatically switched to the second pair of electrodes for the second dimension separation. DNAlyser can run up to 10 gels at a time. Temperature, voltage, and run times can be programmed independently for each dimension.

Tel: +31 715 214 575 Fax: +31 715 210 236 RSN 970



## Capillary electrophoresis system

The P/ACE DNA system from Beckmann Instruments (Fullerton, CA) automates the separation, analysis, and documentation of oligonucleotides, PCR products, and restriction fragments. The system includes the P/ACE 5000 capillary electrophoresis system with a laser-induced fluorescence (LIF) detector, software, and a range of eCAP chemistries optimized for DNA analysis.

Tel: +1 800 742 2345 Fax: +1 800 643 4366 RSN 971