

# The new common Markits

Marketplace is an occasional product review section that highlights a selection of new products that are directly applicable to the genetics community. We welcome suggestions for future features.

Perhaps the most extensively tested diagnostic kit available is the cystic fibrosis kit, launched by Cellmark Diagnostics and Kodak Clinical Diagnostics. The first kit, aimed at the North European caucasian population, will test for CFTR mutations 621+1G>T, G551D, G542X and of course  $\Delta F508$ . Subsequent releases will be tailored to the predominant mutations of a variety of populations. The approach taken is the combined PCR and Cellmark's ARMS (amplification refractory mutation system) technique applied to buccal cells or whole blood and provides results in about six hours. Although initially priced at £30.00 per test, substantial discounts will be offered to bulk users who are expected to be clinical genetics groups with prior expertise in genetic diagnosis and counselling.

The proliferative life sciences community continues to release new twists and turns to the many kit systems available. Bio-Rad announces a Prep-A-Gene Master Kit that

has released a protocol allowing the sequencing of PCR products without a separate purification process. Following amplification, exonuclease I and shrimp alkaline phosphatase (the highest quality form of the enzyme available) are added sequentially to the reaction. These remove any remaining single stranded DNA and nucleoside triphosphates, respectively. The entire resulting reaction can then be used for subsequent sequencing. The £240 kit contains all the purifying reagents and the Sequenase version 2.0 reagents and is sufficient for 100 sequencing templates.

In an imaginative vein, Invitrogen has launched a kit for enriching rarer mRNA species. cDNA is prepared as usual from the complex and differentiated mRNA pool. mRNA isolated from undifferentiated tissue and representing the common species to be removed, is treated with photobiotin and hybridized to the cDNA pool. Common sequences form DNA/RNA duplexes whereas the rare cDNAs remain single stranded. The common species can then be removed by incubation with streptavidin, leaving the subtracted or enriched cDNA. The kit, can be used for five reactions, costs \$250, and Invitrogen claim the three-day protocol can result in a seven-fold enrichment of rarer sequences.

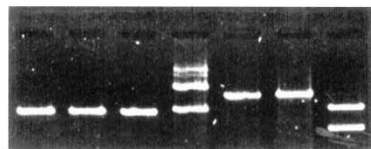
Molecular Bio-Products an-

nounces a product that might do away with the tedious and unpopular DEPC and high-temperature procedures for preparing equipment for RNA work. Instead they advocate RNase AWAY, a nuclease decontaminant that immediately removes all RNase (and DNases) and DNA contaminants. The product can be used on laboratory surfaces, equipment and even pipettes. \$24.95 buys you 250 ml of



Molecular Bio-Products' RNase AWAY.

Agarose gel analysis of cut plasmids purified using a conventional phenol/chloroform approach (lanes 1-3) and the Prep-a-Gene kit (lanes 5-7). Lane 4, uncut plasmid.



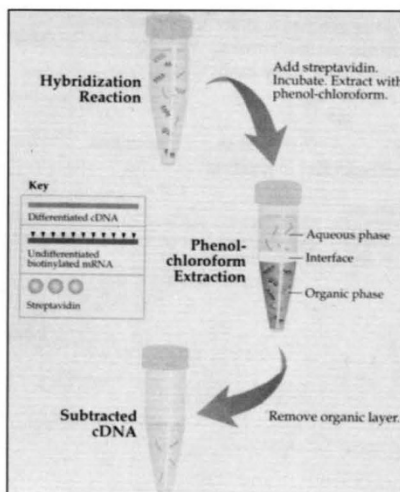
purifies most common types of DNA, including plasmid, cosmid, phagemid or M13 DNA, larger PCR products and genomic DNA and thus avoids the need for separate protocols. The basic form of this versatile kit supplies enough reagents for 50 plasmid or phage miniprep. procedures or 100 DNA purifications from agarose. The novel purification matrix is silica based and similar to other systems in that the recovered DNA is typically up to 50 kb in size, although BioRad suggest that due to an improved binding capacity of the matrix it is more efficient with a claimed recovery in the order of 85 - 95%.

In an attempt to avoid conventional purification, Amersham Life Sciences

the solution which (although the manufacturers do not particularly encourage its reuse) need not be discarded immediately after one application. Free samples are available.

To those who cannot prise themselves away from blotting and autoradiography, B/T Scientific Technologies bring a ray of hope with an improved high speed film. The film, dubbed Quicksilver, is said to reduce exposure times five fold over conventional films. Lighttools Research, who developed the product, tell us the material is appropriate for Southern and northern blots using either <sup>32</sup>P or chemiluminescence and requires no additional equipment or procedures. Ten sheets cost \$49.95.

Notes compiled by Adrian J. Ivinson.



The Subtractor kit from Invitrogen.

For more information call:

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