

Autumn days, purple haze

This edition of marketplace includes vectors encoding fluorescent protein, a 'gene' gun, a methylation assay and an antibody that triggers Fas-mediated apoptosis.

If, like the late Jimmy Hendrix, you can't tell night from day and things just don't seem the same, then it might be time to try some new products. Products such as Invitrogen's new pTracer™ mammalian expression vectors, designed to identify transfected cells that contain your gene of interest. Each vector constitutively expresses green fluorescent protein with the Zeocin® resistance marker, so that within about 36 hours of transfection, transfected cells can be identified by eye or FACS. These vectors are available with the SV40 promoter or the CMV enhancer/promoter.

Exploiting a more direct means to 'introduce' plasmids into cells and tissues, BioRad have recently marketed a more accurate version of their 'helios gene gun', which, they are keen to point out, is not a toy, but is easy to use. "After a few minutes of spinning and prepping to ensure uniform distribution of nucleic acid on gold particles, the prep tube was cut into 50 cartridges, which can be stored for several months. Twelve cartridges were loaded into the cartridge holder, and we

were ready for action", reported James Wong, of BioRad. The gun system treats a smaller area than its predecessor and eliminates the use of complex biological vectors or potentially toxic treatments. According to Jerold Wong, of the Department of Pharmacology and Neurosciences, University of California, San Diego, its best advantage is its capacity for transfecting cells *in situ*.

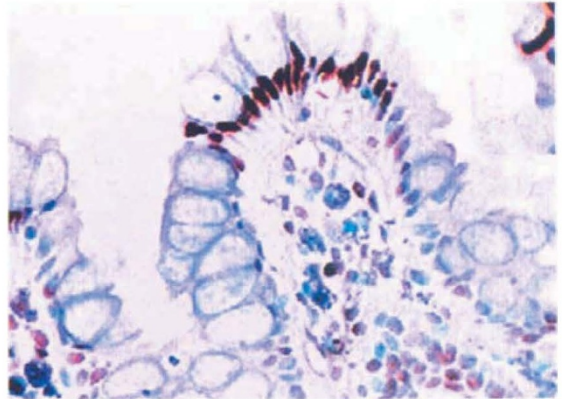
For those who have their sights fixed upon the methylation of tumour-suppressor genes, Oncor has announced the first gene-methylation assay that detects the loss of suppressor-gene function. The technique allows one to directly distinguish methylated from unmethylated DNA, allowing the detection of as few as one 'methylated' cell in one thousand

'unmethylated' ones. With appropriate timing, Oncor has also marketed telomerase-negative and -positive control cells and lysis buffer, to be used in conjunction with the TRAPEZE™ telomerase detection kit.

For those with an eye for apoptosis, Amersham Life Science has produced the Klenow FragEL™ DNA fragmentation kit—a non-isotopic system that uses Klenow DNA polymerase to label DNA breaks in apoptotic nuclei. End-labelling allows the apoptotic nuclei to be visualised in tissue sections by incorporation of nucleotides that are detected colourimetrically. Boehringer Mannheim are now selling an anti-Fas/APO-1 antibody that triggers apoptosis in transformed cells within five hours of application. The antibody is suitable for triggering apoptosis in SKWb.4 and Jurkat

cells, and can be used to Western blot. Biotin-conjugated anti-Fas antibody is also available for western blotting, immunohistochemistry and FACS analyses.

For large-scale screening, Immulite 2000, the new version of a robotic immunoassay system from Diagnostic Products Corporation®, may help. The '2000' model processes samples at twice the rate of its predecessor, and offers both routine and esoteric assays with a range of features that make it better suited to routine, automated analysis. In conjunction with antibodies also



Colonic villi and crypts stained with the Klenow-FragEL DNA Fragmentation kit (Amersham Life Science).



The IMMULITE 2000 (Diagnostic Products Corporation).

supplied by the manufacturer, it is suitable for tumour and serum markers and markers of infectious disease and allergy.

It's often those little things that have a disproportionate effect on quality of life and the success or failure of an experiment or project. It might therefore be worth investing in computer labels for moist surfaces, made by Computer Imprintable Label Systems Limited. These will bond permanently with a moist surface and are able to resist freezing, high temperatures (for example, 155 °C), chemicals and solvents. They come in any size, shape or colour, with logos, symbols or fixed information. Another wrinkle-saver may be the microtube rack from Vector Laboratories, a product with magnetic appeal. Embedded with a magnet, it holds a 1.5-ml microcentrifuge tube which is also embedded with a magnet, allowing separation procedures to be performed quickly and easily. This could also prove handy for delicate manipulations in which any movement of the tube is undesirable.

Notes compiled by BETTE PHIMISTER

For more information, call:

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