FLUORESCENT DNA QUANTITATION KIT

The new Fluorescent DNA Quantitation Kit utilizes the fluorescent DNA intercalator, bisBenzimide H33258, otherwise known as Hoechst dye, and a simple method that may be easily scaled for a single cuvette or for high throughput in multiwell plates. The kit includes Fluorescent DNA Dye Solution, Fluorescent DNA Standard, and Fluorescent DNA Assay Buffer, provided at 10X in volumes sufficient to perform up to 750 reactions. Assays are performed by fluorometric reading of a DNA standard series and unknown samples prepared in diluted Fluorescent DNA Dye Solution. The selective binding of the bisBenzimide H33258 dye to A-T base pairs results in significant fluorescent emission at 460 nm in the presence of DNA. The dye has low affinity for RNA, which improves specificity and sensitivity of the assay results when using impure samples. The assay also tolerates protein contamination that may be present in crude extracts and various buffer compositions commonly used in DNA extraction.

AMRESCO

For info: 800-448-4442 | www.amresco-inc.com

FFPE ASSAY KIT

The new OncoScan FFPE Assay Kit is a whole-genome copy number assay for highly degraded formalin-fixed paraffin-embedded (FFPE) solid tumor samples. Despite the growing need of cancer researchers and clinicians, obtaining high-quality, whole-genome copy number data from degraded FFPE-derived tumor DNA has remained extremely challenging due to the limitations of current methods such as FISH, array CGH, and next generation sequencing technologies. The new OncoScan FFPE Assay Kit, utilizing Affymetrix' unique Molecular Inversion Probe technology, is capable of analyzing small amounts of highly degraded DNA from FFPE samples quickly and affordably. This new product provides whole-genome copy number data with specifically enhanced high resolution in approximately 900 known cancer genes, loss of heterozygozity across the whole genome as well as clinically relevant somatic mutation data—all from a single assay. The OncoScan Nexus Express Software enables copy number calls for hundreds of samples in minutes and will be included with the product.

Affymetrix

For info: 888-362-2447 | www.affymetrix.com

NGS DATA ANALYSIS SOFTWARE

BioDT is an open source suite of next generation sequencing (NGS) data analysis software and services. The new platform addresses the shortcomings found with current data analysis offerings by delivering much higher performance and an intuitive interface, thereby enabling genomic and biomedical researchers to more quickly glean meaningful insights from their data. NGS data analysis is now considered an essential tool for basic and clinical genomic research. While the Big Data generated by such research can be acquired more quickly and at a lower cost, it has become increasingly difficult to derive meaningful insights from it. Existing solutions have proven slow, with complex yet inflexible user interfaces, long turnaround times and difficult-to-interpret results. These shortcomings have meant higher costs and delays in potential breakthroughs. BioDT is an open source platform capable of analyzing NGS data up to 100 times faster than similar systems, thanks to a proprietary execution engine and a Hadoop-based architecture.

BioDatomics

For info: 877-249-6660 | www.biodatomics.com

SCREENTAPE ASSAYS

Two new assays are available for the 2200 TapeStation system: the RNA ScreenTape and the D1000 ScreenTape assays. Both assays are essential for the quality control of samples in next generation sequencing (NGS) workflow. They replace Agilent's R6K and D1K ScreenTape assays. The new RNA ScreenTape assay delivers qualitative and quantitative assessment of total RNA for both eukaryotic and prokaryotic samples, with a Bioanalyzer-like electropherogram and RNA Integrity Number equivalent quality score. The new D1000 ScreenTape assay builds on the success of the D1K ScreenTape, with closer alignment in sizing and quantification to the market-leading 2100 Bioanalyzer system. The 2200 TapeStation system is an ideal technology for high-quality NGS, providing a simplified, automated process for nucleic acid quality control. With enhanced performance, these new assays optimize quantification and sizing and improve RNA resolution.

Agilent Technologies

For info: 800-227-9770 | www.agilent.com/genomics/NGS-QC

RNA METHYLATION QUANTIFICATION KIT

A new, breakthrough approach for the identification of the "fifth RNA base," N6-methyladenosine (m6A), has been developed to efficiently study RNA methylation. This technology is based on a high throughput strip-well format and is also incorporated into the first commercially available product, the EpiQuik m6A RNA Methylation Quantification Kit, for rapidly quantifying m6A RNA methylation. Epigentek's new quantification technique can be used for rapidly and accurately identifying m6A in RNA or detecting m6A-specific RNA methylation in a high throughput format, suitable for use in any species including mammals, plants, fungi, bacteria, and viruses in a variety of forms such as cultured cells, fresh and frozen tissues, paraffin-embedded tissues, plasma/serum samples, and body fluid samples. In the assay, RNA is bound to strip wells and the m6A contained in the RNA is then immunospecifically detected using a high-quality m6A antibody.

Epigentek

For info: 877-374-4368 | www.epigentek.com

Electronically submit your new product description or product literature information! Go to www.sciencemag.org/products/newproducts.dtl for more information.

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and governmental organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by Science or AAAS of any products or materials mentioned is not implied. Additional information may be obtained from the manufacturer or supplier.

New Products

Science **343** (6170), 557.
DOI: 10.1126/science.343.6170.557-a