



### miRNA Profiling Assays

A new range of multiplex microRNA (miRNA) profiling assays is now available for high-throughput validation of miRNA biomarkers, based on the new Firefly particle technology. The new Multiplex Cellular miRNA Assay and Multiplex Circulating miRNA Assay allow researchers to rapidly and cost-effectively profile up to 68 miRNAs in each well of a 96-well plate, with readout on a standard flow cytometer. These assays offer an easier workflow for larger sample numbers compared to alternative methods such as quantitative polymerase chain reaction (qPCR), microarray, and sequencing, which can be resource intensive or require challenging data analysis. The Multiplex Circulating miRNA Assay enables profiling of miRNAs from small volumes of crude biofluids including serum and plasma, with no need for RNA purification, while the Multiplex Cellular miRNA Assay is optimized to work with purified RNA. The Multiplex Circulating miRNA Assay is particularly suited for studies targeting low-abundance miRNAs or studies in which the amount of each sample is limiting.

#### Abcam

For info: 888-772-2226  
www.abcam.com

### NGS Library Preparation

ThruPLEX Plasma-seq is powered by ThruPLEX chemistry to generate high performance next-generation sequencing (NGS) libraries from cell-free DNA isolated from plasma. The chemistry is optimized specifically for cell-free DNA to maximize the library complexity and to preserve the guanine-cytosine (GC) representation of the input DNA. Starting from less than 1 ng to 30 ng of cell-free DNA, ThruPLEX Plasma-seq generates indexed Illumina NGS libraries that are highly reproducible and consistent in performance between replicates and across different input amounts. ThruPLEX Plasma-seq is ideally suited for applications such as liquid biopsy, circulating tumor DNA (ctDNA) analysis, targeted sequencing, and noninvasive prenatal testing (NIPT).

#### Rubicon Genomics

For info: 734-677-4845  
www.rubicongenomics.com



### Real-Time PCR System

The real-time polymerase chain reaction (PCR) system qTOWER 2.0 not only wins with its modern design, but also allows quantitative PCR in the established 96-well format, thus providing an open platform for each kind of qPCR plasticware, from 0.2 mL single

tubes to 96-well microplates. The high-grade silver sample block of qTOWER 2.0 also guarantees a temperature homogeneity of 0.2°C over the entire block and is thus suited for any real-time PCR application, with up to six fluorescent dyes. In combination with the available gradient function, additional adaptation to different assays becomes easily possible. Furthermore, the qTOWER 2.0 is equipped with a patented fiber-optic shuttle system for optimal excitation and detection of a variety of known fluorescent dyes. The PC-based system also contains a wide spectrum of optimized analysis tools, including absolute and relative quantification, delta-delta cycle threshold (Ct) method, PCR efficiency, allelic discrimination, endpoint detection, and protein determination.

#### Analytik Jena

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www.analytik-jena.com

### Exon Arrays

CytoSure Constitutional v3 arrays deliver the most advanced, high-resolution developmental disorder arrays currently available. Oxford Gene Technology has optimized the arrays via a proprietary probe design algorithm and experimental validation, enabling the selection of highly targeted, specific probes throughout the genome. Using an informed, sophisticated approach to array design, more of these optimized probes have been placed in regions of the genome that are most likely to detect a biologically relevant aberration. The result of this careful design procedure means that regions with the highest priority are covered at exon-level resolution on the arrays, enabling single-exon copy-number variation (CNV) detection in up to 502 prioritized genes of interest. Through combining superior array design capabilities with the latest research-led gene content, the most advanced array design is now available for accurately and easily identifying the causal aberrations underlying developmental delay. Providing straightforward analysis, all CytoSure arrays come with CytoSure Interpret software and full on-site training, streamlining data analysis, and interpretation.

#### Oxford Gene Technology

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### Oligonucleotide Column

The AdvanceBio oligonucleotide column is the first high-pH, stable, superficially porous particle-based liquid chromatography (LC) column for oligonucleotide analysis. It builds on Agilent's innovations in superficially porous, silica-based columns for biomolecule separations, which began with the Poroshell 300 in 2001, and includes AdvanceBio peptide-

mapping, glycan-mapping, and reversed phase-monoclonal antibody (RP-mAb) columns. The right particle design gives researchers the flexibility to use high-performance or ultra-high-performance LC systems. AdvanceBio's increased flexibility also allows more efficient use of existing laboratory resources, thus reducing costs. AdvanceBio oligonucleotide columns and oligonucleotide standards improve the reliability of results and reduce costs for therapeutic oligonucleotide analysis.

#### Agilent Technologies

For info: 877-424-4536  
www.agilent.com

Electronically submit your new product description or product literature information! Go to [www.sciencemag.org/products/newproducts.dtl](http://www.sciencemag.org/products/newproducts.dtl) for more information.

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