NEW PRODUCTS: GENOMICS

NEXT GENERATION SEQUENCING

The Access Array integrated fluidic circuit (IFC) eases the burden of library preparation for resequencing or long-range polymerase chain reaction (PCR) because it facilitates the amplification and barcoding of 48 samples in parallel, with minimal time and labor, and in as few as three hours with yields that are equimolar and routinely at 100,000,000 or 1,000,000,000 amplicons. Because every sample can be identified by its barcode, all 48 samples can be multiplexed at the sequencing step. This capability dramatically reduces the time and money required for large-scale projects. Scientists interested in large cohort studies can relatively easily sequence specific genes of interest from hundreds of individuals in a matter of weeks.

Fluidigm Europe

For info: +33-44-259-386 | www.fluidigm.com

WHOLE REFERENCE GENOMES

Whole reference genomes are available for NextGENe second-generation sequence analysis software. Human, mouse, and rat genomes are currently available in formats for use with data from the Illumina GA systems, Roche Genome Sequencer FLX systems, and AB SOLiD Systems. Maize and bovine genomes are in development. The current version of NextGENe software includes a whole-genome builder, which allows users to construct a completely annotated reference of any species. Reference genome annotation includes gene name, chromosome position, reference nucleotide, reported variants, amino acid sequence, and dbSNP identification, as well as a direct link to the dbSNP database.

SoftGenetics

For info: 814-237-9340 | www.softgenetics.com

INSERTION SEQUENCE DETECTION KIT

The White Glove IS Detection Kit tests for the presence of transposable insertion sequence (IS) elements in the genomes of commonly used *E. coli* strains. The kit can also be used to determine which elements have transposed from these genomes into a plasmid of interest propagated in these strains. Scarab Genomics also offers Clean Genome strains of *E. coli,* which do not contain the IS elements naturally present in the genomes of *E. coli* strains commonly used for protein and plasmid production. IS element transposition is known to be stimulated by the cell stress response and can lead to the "hopping" of IS elements into plasmid DNA or into other regions of the bacterial chromosome. The transposition of IS elements into an expression vector can interfere with the expression of a foreign protein in *E. coli.*

Scarab Genomics

For info: 888-513-7075 | www.ScarabGenomics.com

AUTOMATED SAMPLE PREPARATION FOR SEQUENCING

A new automated bead-washing system based on the Freedom EVO 75 workstation has been developed to reduce the manual sample preparation needed for next generation sequencing. In the new system, the Freedom EVO 75 bead-washing station is equipped with a two-channel LiHa arm, a Te-MagS magnetic separation module, and all the racks and carriers required for parallel preparation of 24 templated bead samples. The system's software features washing protocols developed by Life Technologies for optimal sequencing performance of the SOLiD System.

Tecan Group

For info: +41-44-922-81-11 | www.tecan.com

AUTOMATED MICROFLUIDICS

The LabChip XT is an automated nucleic acid fractionation instrument designed to remove a key bottleneck in the workflow of next generation sequencing by replacing the tedious gel isolation and purification steps used for size selection of sheared genomic DNA. The LabChip XT and its software make use of a multichannel microfluidic chip to quickly process samples independently and without the potential for cross-contamination.

Caliper Life Sciences

For info: 781-684-6548 | www.caliperLS.com

MICROARRAYS

Three new CytoSure ISCA aCGH arrays were designed in collaboration with the International Standard Cytogenomic Array (ISCA) Consortium to meet all resolution, multiplexing, and budget requirements. The 8 by 60k, 4 by 180k, and 4 by 44k CytoSure ISCA formats provide powerful arrays focusing on genome regions associated with diseases and syndromes in addition to offering whole genome coverage. Through a proprietary 60-mer probe design and multiple rounds of optimization, the CytoSure ISCA arrays can ensure reliability and confident detection of genetic aberrations with high signal-to-noise ratios. Each array is supplied with CytoSure Interpret analysis software for effortless translation of data into meaningful results.

Oxford Gene Technology

For info: +44-(0)-1865-856828 | www.ogt.co.uk

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 availabilty 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 **328** (5975), 252.
DOI: 10.1126/science.328.5975.252-a