

new products: DNA/RNA analysis

**Automated Single-Cell Transfection**

The NanoFountain Probe Electroporation system (NFP-E) performs automated, precise, and efficient delivery of molecules inside cells. A high-resolution, 3-axis robotic arm with feedback control, which is integrated to an inverted optical microscope, brings a sterile glass probe into contact with individual adherent cells cultured on standard dishes or multiwell plates. The NFP-E uses localized low-voltage electric fields to open transient pores on the cell membrane and transport

proteins and/or nucleic acids inside the cell. Through image acquisition and proprietary hardware/software, the system exhibits point-click-transfect capabilities, which means that cells can be selected with the click of a mouse and the system will transfect all targeted cells automatically at a rate of 15 cells/min. The NFP-E is an ideal solution for cell-specific gene editing, clonal cell line generation, hard-to-transfect cells, pathway analysis, and drug screening.

Infinitesimal LLC

For info: 224-251-8192
www.infinitesimal-llc.com

CRISPR Libraries

DESKGEN Series CRISPR Libraries support gene editing efforts in academic and biopharma settings. The series consists of six new CRISPR library products, each of which can be tailored to an investigator's list of genomic targets using any delivery method. Disrupt Libraries can be used to functionally knock out genes to reveal novel druggable targets and essential pathways. Tile Libraries saturate coding and noncoding regions to reveal genotype-phenotype relationships. SNP-In Libraries allow high-throughput insertion and deletion knockins across the genome. Interfere Libraries silence target gene expression with CRISPR interference (CRISPRi). Activate Libraries allow overexpression of target genes with CRISPR activation (CRISPRa). Predict Libraries provide a unique scoring algorithm optimized for teams working on specific model cell lines or organisms, enabling other libraries to be designed more effectively.

Desktop Genetics

For info: +44-(0)-207-078-7291
www.deskgen.com/landing

Custom mRNAs

AMS Biotechnology (AMSBIO) provides custom-designed, highly modified mRNAs prepared by an advantageous in vitro transcription methodology. Traditional approaches for engineering changes in cellular expression profiles have employed mostly DNA- or RNA-based viral and nonviral vectors. Unfortunately, these methods carry high risks due to genomic integration with permanent genetic alteration of cells, and safety and ethical concerns relating to the use of DNA-based vectors in human clinical therapy. Until recently, concerns about RNA degradation problems have halted widespread use. The AMSBIO custom synthetic mRNA service uses Ψ-containing mRNA, which is translated more efficiently than its unmodified counterpart, and results in higher protein expression while reducing the innate antiviral response. This service includes synthesis of synthetic DNA; plasmid cloning; purification; full DNA sequencing documentation; PCR amplification of insert; and subsequent RNA synthesis by in

vitro transcription, purification, and characterization. AMSBIO synthetic mRNA is made to research grade for development applications and to Good Manufacturing Practice grade for cell therapy.

AMS Biotechnology

For info: 617-945-5033
www.amsbio.com/highly-modified-mrna.aspx

DNA Library Prep Kit

Do you need a faster, more reliable solution for DNA fragmentation and library construction? The NEBNext Ultra II FS DNA Library Prep Kit meets the dual challenge of generating superior NGS libraries from ever-decreasing input amounts and providing simple scalability. Enzymatic shearing increases library yields by reducing DNA damage and sample loss. Our new fragmentation reagent is also combined with end repair and deoxyadenosine (dA)-tailing reagents, and a single protocol is used for the full range of input amounts (100 pg–500 ng) and guanine–cytosine content. You'll be thrilled to pieces with the result—a reliable, flexible, high-quality library prep that is fast and scalable.

New England Biolabs

For info: 800-632-5227
www.neb.com

DNA Centrifugal Sample Concentrator

Genevac's miVac DNA centrifugal sample concentrator is designed to efficiently remove water and organic solvents from biological samples containing nucleic acids. The compact benchtop system includes a built-in high-performance vacuum pump, concentration chamber with electromagnetic drive for quiet, maintenance-free operation, and a fixed aluminum rotor for microcentrifuge tubes. To use the system, simply position it on your lab bench, connect the power lead and exhaust tube, and start benefiting from fast, trouble-free nucleic acid concentration. A clear acrylic lid allows you to monitor progress and is specially treated with a novel coating to resist the most aggressive chemicals and solvents. Experimental parameters including concentration time and temperature can be easily selected and set using the intuitive dial and display system. To improve performance and productivity, Genevac has developed built-in special operating modes for removing water and alcohols—the most common solvents encountered when concentrating nucleic acid samples.

SP Scientific

For info: 845-255-5000
www.spscientific.com

Agarose Tablets

Midori Green Advance Agarose Tablets are a fast, clean solution for preparing agarose gels without any additional time-consuming steps, such as weighing or adding different components. Just add the tablet to pure cold water, heat, and pour. Once the gel hardens, it's ready for loading. Each tablet contains the perfect amount of Midori Green Advance DNA Stain, TBE (Tris-Borate-EDTA) powder, and 0.5 g of the highest-purity agarose—you don't need anything else but water. If you're tired of prepping agarose gels for your lab, this is the quickest, easiest solution to reduce effort and improve the quality of your gels. Midori Green Advance Nucleic Acid Stain is a new, safe alternative to traditional ethidium bromide (EtBr) stain for detecting double-stranded DNA, single-stranded DNA, and RNA in agarose gels. Most importantly, Midori Green is not considered hazardous waste, and can be disposed of according to standard laboratory procedures.

Bulldog Bio

For info: 603-570-4248
www.bulldog-bio.com/midori_green_agarose_tablets.html

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Science

New Products

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