



### Genomic Sample Preparation

Xdrop from Samplix enables single-molecule resolution and bias-free enrichment of genomic regions longer than 100 kilobases from as little as 1 ng genomic DNA. It fits seamlessly with any sequencing platform and works equally well with both short-read and long-read

sequencing systems. The Xdrop system builds on Samplix' proprietary technologies to partition single molecules in easy-to-use microfluidics cartridges. The product comprises an Xdrop instrument for cartridge control, different microfluidics cartridges, and several molecular biology consumables optimized to work with the cartridges. Sample preparation is unique, as it provides for PCR-free enrichment of large single molecules spanning entire genomic regions. The long-range information may comprise phasing, structural variants, repetitive sequences, and more. Furthermore, as it requires very little knowledge of the target sequence, the Xdrop enrichment may also be applied to investigate uncharted genomic regions.

#### Samplix

For info: +45-(0)-82-30-45-00  
www.samplix.com

### Cas9 mRNA

For preclinical and other applications where you need to minimize off-target Cas9 activity, use System Biosciences' injection- and transfection-ready PrecisionX Cas9 SmartNickase mRNA. Unlike the wildtype Cas9 protein, which introduces double-strand breaks, Cas9 SmartNickase introduces paired nicks at the guide RNA-directed site. Creating nicks favors the higher-fidelity homologous recombination process over nonhomologous end joining, with paired nicking shown to reduce off-target activity by 50- to 1,500-fold in cell lines and to facilitate gene knockout in mice without losing on-target cleavage efficiency. As with all our Cas9 delivery options, Cas9 SmartNickase mRNA is functionally validated and comes backed by our expert technical support team—if you've got a genome engineering question, just email tech@systembio.com.

#### System Biosciences

For info: 888-266-5066  
systembio.com

### Custom Oligo Pools

Integrated DNA Technologies has launched oPools Oligo Pools—ready-to-use pools of high-quality DNA oligonucleotides (oligos) between 40–350 nucleotides in length. Pooled oligos are widely used in high-throughput workflows in synthetic biology, diagnostic development, and drug discovery. oPools industry-leading low

error rate of less than 1 in 2,000 nucleotides, coupled with high per oligo yields, facilitate fast, reliable downstream workflows for projects including CRISPR library construction, protein screening, and gene assembly. For synthetic biologists, quick access to affordable, high-quality oligo pools that can go directly into their pipeline without the hands-on time required for PCR amplification allows for faster, more impactful design-build-test cycles—which are so critical to discovery. There is no minimum order—pools are compatible with downstream cloning methods and have a turnaround time of just four to seven business days from ordering to delivery. oPools' unparalleled concentration, uniformity, and accuracy assure high target specificity and provide researchers with the utmost confidence in results.

#### Integrated DNA Technologies

For info: 800-328-2661  
www.idtdna.com

### CRISPR RNP Transfection

Many researchers need to transfect plasmid DNA, short interfering RNA, messenger RNA, and CRISPR ribonucleoprotein (RNP) into cells. For this purpose, OriGene offers Viromers, a complete transfection reagent portfolio and a technology breakthrough that takes advantage of a viral fusion mechanism (hence their name) to help you efficiently deliver genes into cells. Viromer CRISPR was developed to transfect CRISPR RNP into cells with high efficiency. For CRISPR genome editing, Cas9 protein and guide RNA complexes (RNP) are sometimes preferred, since they are fast, have fewer off-target effects, and leave no footprint. This reagent has a low impact on cell viability and physiology, is easily scalable, facilitates guide RNA screening, and is suitable for high-throughput screening.

#### OriGene

For info: 888-267-4436  
www.origene.com

### Homogenizer Spin Column

Porvair Sciences announce the Chromatrap Homogenizer Spin Column, which provides a cost-effective way to homogenize cells and tissues lysates in a single step. Developed as a quick, clean, and efficient alternative to syringe- and needle-homogenization techniques, the Homogenizer offers labs an easy-to-use, downstream sample-processing tool for a wide range of applications, including plasmid miniprep and midiprep and RNA extraction protocols. Good homogenization of cells and tissue lysates enables improvement in yield and quality of obtained plasmids and RNA for downstream applications. The unique proprietary bioshredding Vyon polymer contained within the column reduces lysate viscosity and captures insoluble debris by centrifugation, thereby eliminating the possibility of contamination.

#### Porvair Sciences

For info: +44-(0)-1978-661144  
www.chromatrap.com/homogeniser-spin-column

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

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