Bioseparation



Fast purification

Argonaut Technologies' FlashMaster Personal+ system is designed to improve compound purification workflow in medicinal chemistry applications. The system uses prepacked flash chromatography columns for normal-phase, reverse-phase and ion exchange chromatography, and features a second column position for on-line sample loading, which improves purification efficiency by introducing a sample to a conditioned flash column in a tight band. An integral solvent pump maintains a precise flow control for effective, reproducible flashchromatography purifications. http://www.argotech.com



Selecting cells

EasySep Negative Selection, from StemCell Technologies, is an immunomagnetic cell selection procedure combining the specificity of monoclonal antibodies with the simplicity of a column-free magnetic system. Highly pure human and mouse cells can be obtained by labeling unwanted cells with antibodies directed against specific cell surface antigens. Cells targeted for depletion are cross-linked to EasySep magnetic nanoparticles in a standard FACS tube, which is then placed directly in the specially designed EasySep magnet. The magnet is gently inverted, and the unwanted cells are bound to the magnetic nanoparticle complexes and remain in the tube. http://www.stemcell.com





Tabletop family

Kendro offers Sorvall's newest high-speed tabletop centrifuges: the Legend Mach 1.6, available with five interchangeable biocontainment rotors, offering capacities to 1.6 liters and speeds to 15,000 rpm for unprecedented applications versatility; the spacesaving Primo and refrigerated Primo R, with a wide choice of rotors, adapters for tubes from 0.2-100 ml and top speeds to 15,000 rpm; the refrigerated Stratos, which has a top speed of 23,300 rpm and a selection of nine rotors including fixed-angle, microliter, swinging-bucket and drum rotor types; and the compact Pico and refrigerated Fresco, measuring just 9×13 inches, with a 24-place rotor for 1.5- or 2-ml tubes that spins samples at 13,000 rpm.

http://www.kendro.com



Streamlined cell separation

Beckman Coulter's Allegra X-12 Series benchtop centrifuges spin up to four 750-ml flasks and feature cell culture flask adapters, which save time and reduce the risk of contamination by enabling direct centrifugation of cell culture flasks. They incorporate Beckman Coulter's ARIES Smart Balance rotor technology, which automatically corrects rotor imbalance (up to 50 g in opposing loads) and continues the run without shutdown. Optional adaptors for Corning 25 cm² and 75 cm² Canted Neck Cell Culture Flasks, 250-ml and 500-ml conical tubes, 15ml and 50-ml conical tubes and Vacutainer tubes are available.

http://www.beckmancoulter.com

Cloning

shRNA vectors

GeneSilencer shRNA vectors, from Gene Therapy Systems, are plasmids designed to induce RNA interference of target genes through the expression of small hairpin RNA (shRNAs) in vitro or in vivo. Unlike the traditional chemical synthesis of small interfering RNAs, GeneSilencer vectors use the cellular machinery to encode shRNAs from cloned sequences, a method that offers more convenience, potential cost savings and greater control over gene silencing experimental design. The vectors contain either the U6 or the H1 RNA polymerase III promoter, allowing optimal expression in a wide variety of cell types. Additionally, the vectors are available with GFP reporter genes to allow easy determination of vector transfection efficiency.

http://www.genetherapysystems.com

cDNA library construction

Invitrogen offers the CloneMiner cDNA Library Construction Kit for generating highly representative cDNA libraries without the limitations of restriction enzyme cloning. By eliminating restriction digestion bias from library construction, CloneMiner gives users the highest percentage of fulllength genes. CloneMiner libraries are compatible with Invitrogen's Gateway Technology, so single clones or entire libraries can be transferred to various types of expression vectors while maintaining complete integrity and orientation of the intact gene, and allowing functional analysis of both whole libraries and individual genes.

http://www.invitrogen.com