



Cell Culture Flow Systems

Quasi Vivo Systems are a series of advanced, interconnected cell culture flow systems, specifically designed to improve cellular phenotypes and human in vivo relevance of in vitro cell culture models. By introducing flow to the in vitro environment, Quasi Vivo enables you to generate models with improved predictive value, greatly improving confidence in the validity of your results. The system consists of interconnected cell culture chambers and a peristaltic pump to create

a continuous flow of media over cells. It is available with three different culture chambers (QV500, QV600, and QV900) to support a wide range of applications, including submerged cell culture, coculture, and modeling of air-liquid and liquid-liquid interfaces. Not only is the system easy to set up, it also enables close monitoring of variables during an experiment. Furthermore, its large scale and user configurability allow researchers to perform assays that are not possible with microfluidic systems.

Lonza

For info: 800-638-8174
www.lonza.com/quasi-vivo

Micropatterned Hepatocyte Co-Cultures

HepatoPac Kits are in vitro tools used for predicting likely in vivo outcomes and mechanisms of toxicity with respect to transport and metabolism of drugs and chemicals. HepatoPac plates contain micropatterned co-cultures (MPCCs) of primary hepatocytes and stromal cells. This technology replicates the physiological microenvironment of the liver and allows hepatocytes to exhibit normal metabolic activity for over 4 weeks for both short- and long-term toxicology and efficacy studies during preclinical drug discovery. Hepatocyte health, functionality, and liver enzyme activity can be extensively characterized on the HepatoPac platform. HepatoPac products are available with human, rat, dog, or monkey hepatocytes, or in multispecies formats.

Ascendance Biotechnology

For info: 781-391-0205
ascendancebio.com

Disease States Cell Culture

HemaCare supplies researchers with a wide variety of well-characterized human disease-state primary cells and blood components through our U.S.-based collection network for use in basic, clinical, and translational research studies. The company can provide whole blood, plasma, serum, and peripheral blood mononuclear cells for key research areas from diseases such as acute myeloid leukemia, Crohn's disease, and syphilis. In addition to the products listed in the catalog, HemaCare can offer fresh and cryopreserved primary cells and blood components from other disease states—including various cancers such as renal cancer and multiple myeloma, allergies, and many other conditions.

HemaCare

For info: 877-310-0717
www.hemacare.com/store/products/disease-state.html

Single-Cell Analysis System

The Cyto-Mine Single-Cell Analysis System automates single-cell analysis, sorting, imaging, and dispensing. It is a single, compact, GLP-compliant system that fits in a standard biological safety cabinet. Traditionally, up to three different instruments would be required for each step, resulting in a costly, time-consuming process, using up valuable lab space, and increasing the risk of sample contamination. Cyto-Mine can deliver up to 10 million tests per day, far more than other systems on the market that deliver 10,000 tests in three weeks. The high-throughput system uses Sphere Fluidics' patented picodroplet technology to encapsulate a single cell in growth media and trap secreted molecules, such as antibodies, from the cell as it grows. Since each cell is compartmentalized in the disposable Cyto-Cartridge, monoclonality is assured, and the unique workflow enables selective screening of single cells to find rare lead candidates.

Sphere Fluidics

For info: 888-258-0226
www.spherefluidics.com/products/integrated-systems/cyto-mine

Automated Pipetting Robot

The BRAND Liquid Handling Station (LHS) pipetting robot handles routine tasks at high speed and with the highest precision. It closes the gap between electronic pipettes and complex, expensive pipetting robots. The LHS is a quiet, compact instrument with a unique front door, allowing it to be set up in tight quarters. The instrument has seven working positions and five available liquid ends with single-channel volumes up to 1,000 μ L and multichannel volumes up to 300 μ L. The system has the flexibility to move liquids between reservoirs, tubes, and plates. Applications include PCR, quantitative PCR, and ELISA setup; serial dilutions; microplate replication and reformatting; DNA normalization; cherry picking; cell cultures; and general liquid transfers. Adapters and racks bring consumables to an even height, reducing unnecessary vertical movements to save time during pipetting. The LHS is supplied with extremely user-friendly software—liquid handling protocols are created with ease.

BrandTech Scientific

For info: 888-522-2726
www.brandtech.com/product/liquid-handling-station

Syringe Pump

Hamilton Company expands its PSD/4 precision syringe drive product family with the launch of PSD/4 Smooth Flow. The Smooth Flow delivers exact flow rates in nanoliters per minute with total dispense times up to 8 hours. It is perfect for engineers seeking an economical way to automate processes that were developed on lab-scale pumps, and is also ideal for flow cytometry and microfluidics applications where smaller sample volumes, faster analysis time, and more sensitive detection mechanisms require accurate and extremely small precision flow rates. The compact PSD/4 design now has 192,000 steps of resolution across the 30-mm stroke. The pump is compatible with a variety of catalog and custom valves as well as standard and long-life syringes from 12.5 μ L to 12.5 mL.

Hamilton Company

For info: 800-648-5950
www.hamiltoncompany.com

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