Photochemical Reactor System

Asynt announces the LightSyn Lighthouse—a new photochemical reactor system in their LightSyn range, developed in response to customer demand for higher reaction yields, ease of use, high operational safety, and competitive pricing. The LightSyn Lighthouse uses new technology to channel light through a quartz rod directly into the reaction medium, maximizing power intensity while keeping photon flux even throughout. Using this system, the number of photons lost over distance is significantly reduced in comparison to that of a more typical photoreactor, therefore maximizing the light’s interaction with the sample. The result is faster chemistry and higher reaction yields. Designed to be a useful tool for any lab looking to branch out into larger scale benchtop photochemistry, the LightSyn Lighthouse is simple to set up and to use, with built-in safety features that eliminate risk of UV light exposure. Easily adapted to suit different sized tubes/vials and round bottom flasks, the LightSyn Lighthouse is an effective and versatile system for scaling your experiments.

Asynt
For info: +44-0-1638-781-709
www.asynt.com/product/lightsyn-lighthouse

3’3'-cGAMP ELISA Kit

Cayman Chemical’s 3’3'-cGAMP ELISA Kit is a competitive ELISA that can be used to quantify levels of the bacterial cyclic dinucleotide second messenger 3’3’-cyclic GMP-AMP (3’3’-cGAMP) in bacterial and mammalian cell lysates and cell supernatants. The assay uses a highly specific monoclonal antibody for excellent sensitivity (LOD = 26 pM) and selectivity, has an assay range of 78-10,000 pM, and has been validated by LC-MS/MS to ensure accurate, reliable results. This kit was developed in collaboration with the nucleotide experts at Biolog Life Science Institute, and allows you to assay 24 samples in triplicate or 36 samples in duplicate in under 3 h with a plate-based colorimetric readout.

Cayman Chemical
For info: +1-800-364-9897
www.caymanchem.com/33cGAMP

Reagent Reservoirs

Manufactured to the ANSI/SLAS standard, the range of reagent reservoirs from Porvair Sciences are designed for simple integration into any automated liquid handling system. Moulded from high-purity polypropylene in a Class 10,000 cleanroom environment, Porvair reagent reservoirs offer chemical compatibility with most organic solvents, acids, and bases. High heat resistance allows the reagent reservoirs to be autoclaved clean. With a choice of 20 working configurations, as well as liquid volumes, an optimized reagent reservoir is available to suit liquid handling applications using 8- or 12-channel pipettes right through to 96- and 384-tip automated pipetting systems.

Porvair Sciences
For info: +1-856-696-3605
www.microplates.com/microplates/products/pllate-type/reservoir

Human Cytokine Kit

Gyros Protein Technologies AB introduces Gyrolab Human Cytokine Kit Reagents, the first in a range of biomarker kits. These include five single analyte biomarker kit reagents for the quantification of human inflammatory cytokines: human TNF-a, IFN-gamma, IL-6, IL-10, and IL-4. The new Gyrolab Human Cytokine Kit Reagents are optimized for use on all Gyrolab systems, offer improved assay performance, and meet key customer needs to face the biomarker assay development challenges encountered during drug development programs and regulatory studies. These kits enable high-quality data to be generated through well-characterized kit reagents and standards, while providing a high sensitivity and wide dynamic range to cover the full spectrum of cytokine levels seen in disease states or pharmacodynamic studies. The Gyrolab Biomarker Kits offer convenience and an expedited analytical solution for biomarker quantification by removing the need for assay development. High throughput and automated analyses reduce manual intervention, enable short turn-round times, and accelerate data-driven decisions.

Gyros Protein Technologies
For info: +46-0-18-56-63-00
www.gyrosprotein.com

GMP-grade Human AB Serum for Cell and Gene Therapies

BioIVT supplies Good Manufacturing Practice (GMP) grade human AB serum, a cell culture supplement to enhance the development and manufacturing of cell and gene therapies. Human AB serum supports in vitro cell expansion by providing many of the growth factors, vitamins, nutrients, trace elements, and transport factors found in an in vivo environment. By helping to produce biologically relevant conditions, it allows many primary human cells to grow at a faster rate. This is particularly important for autologous therapies that require using a person’s own cells or tissues, which may divide at a slower rate due to chemotherapy. BioIVT’s GMP-grade human AB serum is produced using the same optimized protocols and enhanced regulatory oversight of source material collection, production, and processing as its research-use only material. But it also has additional viral testing—hepatitis A (plasma-derived only), hepatitis B core antibody, hepatitis E, and parvovirus B19 (plasma-derived only)—and associated documentation. BioIVT is offering both plasma-derived and off-the-clot serum collected from healthy, male AB blood type donors. All products are sterile, filtered, and ready for cell culture.

BioIVT
For info: 516-483-1196
https://bioivt.com

COVID-19 Omicron Research Products

AMS Biotechnology (AMSBIO) introduces further tools for SARS-CoV-2 researchers to help decipher the COVID-19 B.1.1.529 variant. AMSBIO’s easy-to-perform Omicron assay kits come in a variety of read-out detection methods including TR-FRET, fluorogenic, colorimetric, and chemiluminescence. These new kits are ideal for use in validation studies and suitable for rapid high-throughput screening of SARS-CoV-2 inhibitors. Expressing B1.1.529 S protein, Omicron pseudoviruses from AMSBIO are invaluable tools for measuring inhibitory molecules when used in tandem with ACE2 recombinant cell lines or for measuring the activity neutralizing antibodies. AMSBIO’s novel Omicron lentiviruses contain either luciferase or EGFP reporter genes that provide convenient readout of transduction. Also new to the market are a range of Omicron variant recombinant proteins, including nucleocapsid protein and 3CL protease and spike trimer (S1+S2), developed for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

AMS Biotechnology
For info: +1-617-945-5033
www.amsbio.com/sars-cov-2-spike-mutants

Electronically submit your new product description or product literature information! Go to www.science.org/about/new-products-section 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 availability 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.