



In Vivo Imaging Systems

Leveraging hardware and software advances and smart accessory design, the IVIS Lumina S5 and X5 high-throughput benchtop 2D optical in vivo imaging systems provide researchers a streamlined workflow to expedite the understanding of disease progression and to help develop treatments for a wide range of cancers, infectious diseases, and other disorders. Both systems provide high-sensitivity, high-throughput bioluminescence as well as

and fluorescence imaging with spectral unmixing. IVIS Lumina X5 integrates high-resolution X-ray imaging, allowing scientists to explore multiple facets of a disease by providing both molecular-level and highly detailed anatomical information in a single image.

PerkinElmer

For info: 800-762-4000

www.perkinelmer.com/invivo

Natural Killer Cell Expansion Medium

PRIME-XV NK Cell CDM from Irvine Scientific is a chemically defined (CDM), animal component-free medium for the ex vivo expansion of natural killer (NK) cells. Designed for use in NK cell-based immunotherapy research and translational applications, this advanced medium delivers strong cell growth and maintains NK cell potency and functionality without the need for serum supplementation in either the presence or absence of feeder cells. Our innovative formula helps scientists avoid many of the disadvantages associated with the use of feeder cells while maintaining the characteristic morphology and cytotoxicity of NK cells.

Irvine Scientific

For info: 800-577-6097

www.irvinesci.com

Pulse Oximeter

The MouseOx Plus Pulse Oximeter for rodents provides real-time, continuous monitoring of oxygen saturation. This system can be used with either anesthetized or conscious animals. An array of sensors is available, making this system appropriate for rodents sized from neonatal mice to adult rats. MouseOx Plus has a patented design enabling it to detect heart rates of 90 bpm–900 bpm. Many options are available, allowing for a highly customizable system. MouseOx provides the following measurements: arterial oxygen saturation, heart rate, temperature, pulse distention, and breath distention.

Harvard Apparatus

For info: 800-272-2775

www.harvardapparatus.com

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 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 four 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.

BioIVT

For info: 516-483-1196

www.bioivt.com

CAR T-Cell Immunotherapy Reagents

AMS Biotechnology produces a growing range of experimental cell lines, recombinant proteins, and screening services to advance the search for new chimeric antigen receptor (CAR T) cell therapies to treat cancers. A therapeutic CAR is a transmembrane protein designed with an extracellular domain based on an antibody single-chain variable fragment (scFv) and intracellular signaling domains derived from the T-cell receptor gamma (TCR γ) chain, along with other costimulatory receptors. The scFv provides a specific binding domain that recognizes target proteins on cancer cells. A patient's own T cells are isolated and activated, then transfected with a gene expressing the CAR. This reprograms the T cells to identify and attack tumor cells expressing the target protein, creating personalized immune cells designed to specifically target the patient's cancer.

AMS Biotechnology

For info: 617-945-5033

www.amsbio.com/car-t-cell-research.aspx

Animal-Free Recombinant Proteins

Cell Sciences offers Animal-Free Recombinant Proteins for researchers concerned about trace amounts of contaminating growth factors and infectious agents that can sometimes be found in commercially available purified proteins. These proteins are produced with specific prokaryotic or eukaryotic expression systems in a dedicated animal-free laboratory, to ensure these reagents are not exposed to potential contamination by animal components or byproducts during production. All procedures use animal-free media, with dedicated labware and equipment. These products are ready for preclinical research use in life science fields, such as developmental biology, oncology, rare diseases, immunology, and hematology. They are delivered priority overnight in lyophilized or liquid form and come with quality control documentation that includes details on purity, endotoxin levels, and biological activity.

Cell Sciences

For info: 888-769-1246

www.cellsciences.com

Electronically submit your new product description or product literature information! Go to www.sciencemag.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.

Science

New Products

Science **362** (6411), 246.
DOI: 10.1126/science.362.6411.246-a

ARTICLE TOOLS <http://science.sciencemag.org/content/362/6411/246.1>

PERMISSIONS <http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

Science (print ISSN 0036-8075; online ISSN 1095-9203) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. 2017 © The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim to original U.S. Government Works. The title *Science* is a registered trademark of AAAS.