

news release

BioIVT Launches HEPATOMUNE Kit to Facilitate Liver Toxicity and Inflammation Studies for Drug Discovery and Disease Research

Applications for this model include assessing drug candidates' hepatotoxicity, and studying inflammation-related diseases

Westbury, NY – Oct. 19, 2020 – BioIVT, a leading provider of research models and services for drug and diagnostic development, today launched its HEPATOMUNE® kit, a long-term, stable, *in vitro* model for evaluating immune-related and inflammation-mediated liver injury.

HEPATOMUNE cultures are composed of hepatocytes, stromal cells and Kupffer cells in a tri-culture, mimicking the physiological microenvironment of the liver, and providing an optimal model for studying cytokines and cytokine modulators. Cytokines have important roles in chemically induced tissue damage repair, in cancer development and progression, in the control of cell replication and apoptosis, and in the modulation of immune reactions such as sensitization.¹

HEPATOMUNE kit applications range from studying liver physiology, toxicity, and inflammation mechanisms; through investigating liver diseases, such as NAFLD and NASH; to assessing drug candidates' long-term hepatotoxicity or protein and small molecule drug-drug interactions.

HEPATOMUNE cultures demonstrate several important characteristics. They have an *in-vivo* like morphology, express liver-specific genes, exhibit transporter activity and possess functional phase I/II drug metabolizing enzymes. They also secrete diverse liver-specific products and feature functional Kupffer cells, which respond to inflammatory stimuli and can perform phagocytosis. Adding to their versatility, HEPATOMUNE cultures remain viable for up to 10 days.

BioIVT provides HEPATOMUNE cultures in ready-to-use kits, which offer the cells in 24- and 96-well plates, together with the necessary maintenance and application media.

"We are delighted to add HEPATOMUNE kits to our portfolio of tools which provide our clients with a broader array of hepatic tools to study new drugs and how they impact the liver," said BioIVT Senior Vice President, ADME-Tox Dr. Chris Black. "HEPATOMUNE kits complement our HEPATOPAC products and give researchers a unique hepatic inflammation model."

Interested parties can learn more about the new HEPATOMUNE kits at https://bioivt.com/about/technologies/hepatomune-technology or by registering for BioIVT's 2020 Virtual HEPATOPAC User Group Meeting, which will be held online on Oct. 22. Further information about this complimentary event is available at https://hubs.ly/H0xVcW90.

BioIVT's HEPATOPAC® model is an *in vitro* bioengineered co-culture of primary hepatocytes and fibroblasts, which is used for liver-based safety, metabolism, and efficacy evaluations of small molecule drug candidates.

Reference

1 Foster JR. The functions of cytokines and their uses in toxicology. *Int J Exp Pathol*. 2001;82(3):171-192. doi:10.1046/j.1365-2613.2001.iep0082-0171-x https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2517710/

About BioIVT

BioIVT is a leading global provider of research models and value-added research services for drug discovery and development. We specialize in control and disease-state biospecimens including human and animal tissues, cell products, blood and other biofluids. Our unmatched portfolio of clinical specimens directly supports precision medicine research and the effort to improve patient outcomes by coupling comprehensive clinical data with donor samples. And as the premier supplier of hepatic products, including hepatocytes and subcellular fractions, BioIVT enables scientists to better understand the pharmacokinetics and drug metabolism of newly discovered compounds and their effects on disease processes. By combining our technical expertise, exceptional customer service, and unparalleled access to biological specimens, BioIVT serves the research community as a trusted partner in elevating science. For more information, please visit www.bioivt.com or follow the company on Twitter @BioIVT.

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