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Toyo Gosei launches 3D cell co-culture system Cell-able® for DILI with PXB-cells™ to advanced hepatotoxicity in laboratories

Tokyo—Toyo Gosei, a leader in the next generation of micro 3D cell co-culture system based *in vitro* assay products, is pleased to announce the commercial launch of the company's 3D cell co-culture system **Cell-able® for DILI with PXB-cells™** designed specifically for hepatotoxicology applications from October 8th 2014

Application:

1. Ready- to- use 384 well plate with Micro Patterned Fresh Human Hepatocytes Spheroids

This system contains standard "ready- to- use" 384-well 3D cell co-culture plates featuring specially configured micro-patterned 3D spheroids which are co-cultured "PXB-cells™ ; fresh human hepatocytes" with 3T3swiss albino, mouse fibroblast. The hepatocytes' spheroids on these plates mirror the behavior of liver cells in live human, enabling scientists to generate and acquire data that can be useful for prediction of toxic responses to chemical agents (including drug candidates) and improve design of preclinical experiments for drug development. The system also provides a tool for the study of the mechanisms leading to such responses.

2. Transportable

Because PXB-cells™ join Cell-able® strongly, this system could be transported from drug exposure testing facilities to screening their responses ones, even if there is overseas distance between them, used by pharmaceutical, cosmetic and chemical companies for assessing the potential toxicity of chemical compounds in product development.

3. Best practice for DILI prediction

This system focus on the *in vitro* toxicology market. PXB-cells™ can be survived and maintained over 100 days with its hepato-specific functions on Cell-able®. Now, scientists can predict DILI in drug discovery phases using human fresh hepatocytes without changing assay panel caused by scarcity of original donor, which enables more informed approaches to the design of preclinical toxicology studies of drug candidates, and an ability to make better decisions on advancement of chemical agent product development programs in cosmetics and chemical industries.

4. High throughput

This system fit advanced high content imaging system perfectly. There are uniformly shape and size spheroids which are maintained stable in wells. It takes less than one hour to be simultaneously measured by 4 colored fluorescent markers. It would dramatically reduce the time & cost for preclinical toxicology studies.

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Cells in our system are maintained stable with spheroid shape and size in good uniformity. It takes less than one hour to simultaneously measure 4 colored fluorescent markers thus it would dramatically reduce the time & cost in preclinical toxicology studies.

About Toyo Gosei

Toyo Gosei is a leader in innovating unique and proprietary photo sensitive chemicals for use in nano scale patterning, controlling molecular structure, advanced process development in the cutting edge chemical and electronics industry. The company's "Cell-able®" is intended to drive a paradigm shift in drug development.
www.toyogosei.co.jp

About PXB-cells™

PXB-cells™ developed through PhoenixBio Co., Ltd. is fresh human hepatocytes separated from PXB-mouse® , which can provide fresh hepatocytes from same donor anytime on demand. This is a novel breakthrough tool for the *in vitro* studies of drug discovery and development.

PhoenixBio is a leading company in the world of the chimeric mouse with human hepatocytes with keeping its own functions for life science applications such as drug discovering, regenerative medicine. PXB-mouse®, have over 70% of the liver repopulated by human hepatocytes, shows a metabolic profile similar to humans and are therefore utilized as an *in vivo* research model for pharmacokinetic research. PXB-mouse® is also a useful infection model of hepatitis B & C and has been used globally over years since the animals are well-infectable with hepatitis viruses.
www.phoenixbio.com.jp

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