

Empower primary liver cell culture; remove lot by lot variability and elucidate experimental windows using the Discovery-Q

Abstract

Primary human hepatocytes are subject to lot-by-lot variability due to donor differences. Using all these cells with the same experimental windows creates data that is not optimal for research, or confounding effects that can result in false positive or false negatives for the tested drugs. This requires additional vials of cells due to mishandling and delays in experiment completion.

The Discovery-Q can identify experimental the windows for induction, transporter, and metabolism. It can also ensure adequate cell seeding during each experiment. These advantages ensure repeatable and accurate experimental data while using expensive cell cultures.

"The precision of the technology, coupled with its non-invasive, continuous readout means significantly reduced variability, fewer user errors and a true-to-life liver model"

Rafal Witek, Director Advanced Cell Systems, Thermo Fisher Scientific.



Determining experimental window with primary hepatocytes



Hepatocyte Polarization



Determine experimental windows



Monitor Real Cell To Cell interactions



Monitor Real-time Cell Health



Product information

Platform: Discovery-Q

- Compatible with adherent and semi-adherent cell lines
- Simultaneous real time readings of frequency and resistance (dissipation)
- Minimum cell number per well: 1,000
- Label free detection, specialized media or serum not required
- Network based system
- Remote operations on web browser
- Data is date and time stamped and downloadable as CSV files

<u>Cell culture types tested</u>: Primary cell lines (cryopreserved plateable hepatocytes, stellates and co-cultures), isolated cells from liver, breast, lung, umbilical, macrophage, and primary tumors

<u>Cell culture lines tested</u> (not a comprehensive list): HepG2, Sk-Hep-1, DH82, SK-Br-3, MDA-MB-231, HUVEC, BAE, BAEC, HL-60, HT-29, HMEC, NHBE, HMVEC-L, HMVEC-BL, HepRG, Hs578t, FaDu, MCF-7, MCF-12A,

For information regarding pricing of units or any other matters please contact: info@invitrometrix.com



The Discovery-Q and consumable well plate



Make the invisible visible

Invitrometrix Corporation 116 John St. Ste. 340 Lowell, MA 01854 www.invitrometrix.com



Invitro-Q units working in a cell culture incubator.

For Research Only: Not for use in diagnostic procedures

This information is subject to change without notice. © Invitrometrix Corporation 2019 Published in the USA, July 2019 AB-003