

Human Hepatocytes

Cell specification

The liver fulfills many vital processes in mammals. It is the central organ of energy metabolism, responsible for the maintenance of the blood sugar level and the synthesis of plasma proteins. Hepatocytes are the most prominent cells within the liver. They eliminate toxic substances from the blood. In this biotransformation process transporter proteins, phase I + II reactions play a central role. Primary hepatocytes are perfectly suited for *in vitro* metabolism and toxicity/ detoxification studies prior to preclinical or clinical tests.

Human hepatocytes are isolated from livers obtained from male or female donors and are available fresh as suspensions or in various culture formats (6-, 12-, 24- and 96-well). Special configurations are available on request. Donor demographics are available for each donor.

Recommended medium and culture conditions

It is recommended to culture human hepatocytes on collagen coated culture plate in HHMM (Human Hepatocytes Maintenance Medium), a serum-free culture medium containing Hepatocyte Growth Factor and Epidermal Growth Factor. Hepatocyte specific morphology and functions like Cytochrome P450 protein activities are maintained and/ or remain inducible under these culture conditions.

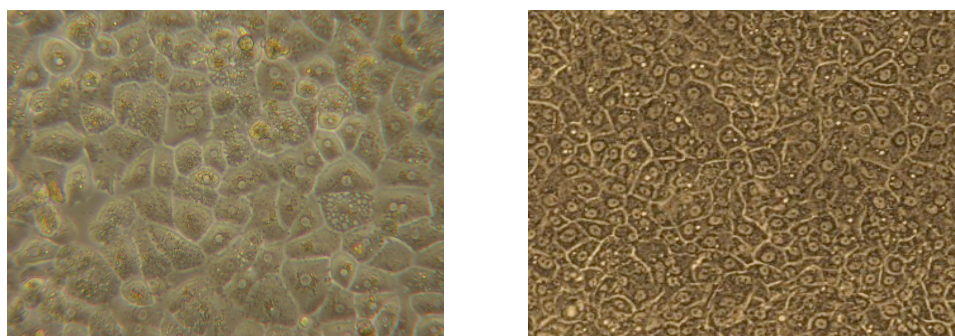


Fig. 1: Human hepatocytes on day 2 (left) and day 32 (right) cultured in HHMM

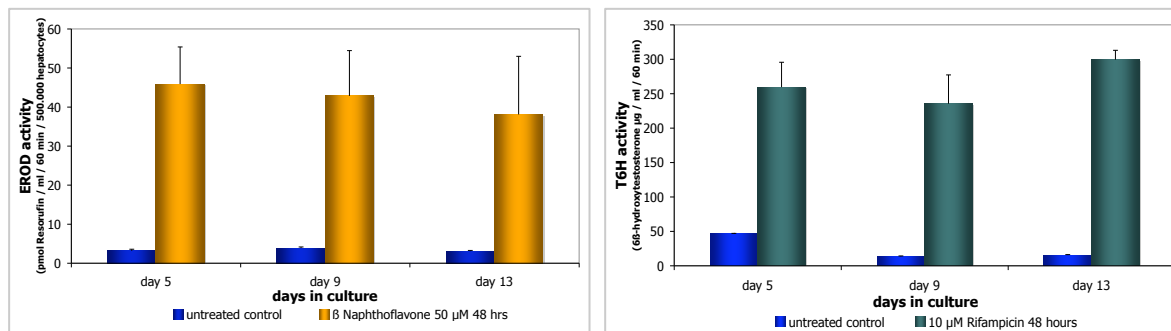


Fig. 2: Induction of CYP1A2 associated EROD activity by β -Naphthoflavone (left) and CYP3A4 associated Testosterone-6 β -hydroxylase (T6H) by Rifampicin (right) in human hepatocytes cultured in HHMM.

Only for research purposes. Not for use in human diagnostics and therapeutics.

Biohazard warning: Tissue fractions such as hepatocytes should be considered as potentially biohazardous, and should be treated as biohazards in the laboratory.

Related Products

HPM-500	Hepatocyte Plating Medium
HHMM-500	Human Hepatocytes Maintenance Medium
CCP-xx	Collagen Coated Cell Culture Plates
RTC-100	Rat Tail Collagen
HHS-01	Human Hepatocytes in Suspension
HHP-xx	Human Hepatocytes on Collagen Coated Plates (6-well, 12-well, 24-well, 96-well)