# PRODUCT SPOTLIGHT

## PRIMARY HUMAN HEPATOCYTES

## HEPATOXCELL™: THE SOLUTION FOR YOUR PREDICTIVE DRUG DEVELOPMENT AND TOXICITY TESTING

Primary human hepatocytes are considered the gold standard for in vitro liver models due to their high predictive value in drug metabolism and toxicity studies. They can provide early insights into how a drug will behave in the human body, potentially reducing the risk of adverse effects in clinical trials. ATCC hepatocytes are meticulously isolated and characterized to ensure the highest quality and performance for your drug development needs.

### WHY CHOOSE OUR PRIMARY HUMAN HEPATOCYTES?

- High viability and functionality: Our hepatocytes exhibit excellent viability and retain key liver functions, making them ideal for drug metabolism, toxicity studies, and liver disease research.
- **Comprehensive characterization:** Each batch undergoes rigorous testing to ensure consistency and reliability, including assessments of enzyme activity, protein expression, and metabolic function.
- Genetic diversity: These cells can be sourced from multiple donors, reflecting the genetic variability found in the human population. This diversity allows for more comprehensive studies on how different genetic backgrounds can influence liver function and drug response.

Product Name	ATCC <sup>®</sup> No.	Notes	Amount
HepatoXcell™ Eco	<u>PCS-450-012</u> ™	Suspension	1 vial, ≥ 4 x 10 <sup>6</sup> cells
HepatoXcell™ Plus	<u>PCS-450-010</u> ™	3-Day Plateable	$1 \text{ vial}, \ge 4 \times 10^6 \text{ cells}$
HepatoXcell™ Pro	<u>PCS-450-011</u> ™	7-Day Plateable	1 vial, ≥ 4 x 10 <sup>6</sup> cells
HepatoXcell™ Thawing Medium	<u>PCS-450-032</u> ™	1 bottle	250 mL
HepatoXcell <sup>™</sup> Maintenance Medium	<u>PCS-450-034</u> ™	1 bottle	500 mL
HepatoXcell™ Plating Medium	<u>PCS-450-038</u> ™	1 bottle	100 mL

#### APPLICATIONS

- Drug metabolism and pharmacokinetics (DMPK)
- Toxicology and safety assessment
- Liver disease modeling
- Regenerative medicine and cell therapy

#### **HEPATOCYTE CULTURE PROTOCOLS**

To maximize the viability and functionality of our primary human hepatocytes, we provide detailed culture protocols tailored to your research needs. Our protocols include:

- **Thawing and plating:** Step-by-step instructions for thawing cryopreserved hepatocytes and plating them to ensure optimal cell attachment and survival.
- Media preparation: Guidelines for preparing culture media that support hepatocyte health and functionality, including recommended supplements and growth factors.
- Maintenance and feeding: Best practices for maintaining hepatocyte cultures, including feeding schedules and media changes to sustain cell viability and function.

#### **QUALITY CONTROL**

Ensuring the highest quality of our primary human hepatocytes is our top priority. Our quality control measures include:

- Viability testing: Each batch is tested for cell viability using trypan blue exclusion or similar assays to ensure high survival rates.
- **Functional assays:** We assess key liver functions, such as cytochrome P450 enzyme activity, urea synthesis, and albumin production, to confirm the hepatocytes' metabolic competence.
- Sterility testing: All batches undergo rigorous sterility testing to ensure they are free from bacterial, fungal, and mycoplasma contamination.
- Genetic stability: Genetic analyses to ensure the genetic identity and enzyme expression of the hepatocytes.
- Batch consistency: Comprehensive characterization of each batch ensures consistency and reproducibility across different lots.

#### SHIPPING AND STORAGE INFORMATION

We ensure that our primary human hepatocytes reach you in optimal condition through our reliable shipping and storage protocols:

- **Cryopreserved hepatocytes:** Shipped in temperature-monitored liquid nitrogen tanks to maintain ultra-low temperatures. Upon receipt, store immediately or thaw and begin your assay.
- Global shipping: We offer reliable shipping options worldwide, ensuring timely delivery to your laboratory.

### EXPLORE HEPATOXCELL<sup>™</sup> HEPATOCYTES AND MEDIA TODAY

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