



## Human Pooled Primary Hepatocytes (HP<sup>2</sup> Heps™) - Cryopreserved Specification Sheet

Human Pooled Primary Hepatocytes, 10-Donor  
Human Pooled Primary Hepatocytes, 20-Donor

Lifeline’s Human Pooled Primary Hepatocytes (HP<sup>2</sup> Heps) provide an ideal culture model for drug testing and drug development. HP<sup>2</sup> Heps contain cryopreserved hepatocytes pooled from either 10 or 20 different donors and have undergone only one freeze cycle. Pooled hepatocytes provide the genetic diversity necessary for superior reliability and predictability of the metabolic characteristics of a test compound relative to a representative population. Pooled hepatocytes increase experimental control and reduce costs by eliminating the need to conduct redundant experiments necessary to obtain population-based data. Each lot has undergone a single freeze cycle, assuring maximum hepatocyte viability and consistency from donor to donor within the pool.

HP<sup>2</sup> Heps are functional and convenient. Each lot is characterized and undergoes extensive quality testing, including viability and drug metabolizing activity. Lifeline’s HP<sup>2</sup> Heps come with data on enzyme activity, including cytochrome P450s (CYP), 7-Hydroxycoumarin glucuronidation (UGT) and 7- Hydroxycoumarin sulfonation (SULT). Lifeline’s frozen HP<sup>2</sup> Heps are convenient, eliminating the need to obtain liver tissue, and conduct multiple cell isolations.

### CELL FEATURES:

- Each donor’s hepatocytes have been cryopreserved ONCE immediately after isolation and purification.
- Pools of 10 or 20 donors are available. Each donor is represented by a significant number of cells relative to the pool.
- There is extensive quality control providing characterization of viability and enzyme activity from both individual donors and on the total pool.
- Lifeline guarantees performance and quality.
- Donor information is available.

### HUMAN POOLED PRIMARY HEPATOCYTES ARE TESTED FOR:

• Percent viability	≥ 70%
• Cytochrome P450 (CYP)	1A2; 2A6; 2B6; 2C8; 2C9; 2C19; 2D6; 2E1; 3A4 (Testosterone 6β-hydroxylation & Midazolam 1’-hydroxylation); 3A5
• Phase II metabolism	7-Hydroxycoumarin glucuronidation (UGT) & 7- Hydroxycoumarin sulfonation (SULT).
• Cell Count	5 million cells/vial for 10 donor pool; 5 million cells/vial for 20 donor pool
• Donor Information	Age; Ethnicity; Gender; Cause of death; Infectious disease status
• Virus Testing (Donor Serology)	Tissue donors tested negative for HIV 1 and 2; HTLV and Hepatitis B & C

To place an order, please visit [lifelinecelltech.com](http://lifelinecelltech.com) or call customer service at 877.845.7787.

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### Safety Statement and note regarding products derived from human tissue:

This product is For Research Use Only and is not approved for human or veterinary use or for use in *in vitro* diagnostic or clinical procedures. All tissue used to isolate Lifeline's hepatocyte products are determined to be non-transplantable by a medical professional. Although Lifeline only accepts tissue from donors who test negative for HIV 1 and 2, and Hepatitis B and C, all products derived from human tissue should be regarded as a potential biohazard and should be stored and handled accordingly.

### The Lifeline® Guarantee

#### Consistency and Reproducible Results

Lifeline's rigorous quality control ensures sterility and performance to standardized testing criteria. All donated tissues have been obtained under proper informed consent and adhere to the Declaration of Helsinki, The Human Tissue Act (UK), CFR Title 21, and HIPAA Regulations relative to obtaining and handling human tissue for research use. If Lifeline's products do not meet our posted performance and quality standards, we will replace them at no charge or provide a full refund. Upon request, Lifeline will provide lot specific QC test results, material safety data sheets and certificates of analysis. See complete guarantee/warranty statement at [lifelinecelltech.com](http://lifelinecelltech.com) or contact your Lifeline representative for more information.

#### Handling and Storage

Lifeline recommends storing cryopreserved vials in liquid nitrogen vapor phase. Handle cryopreserved vials with caution. Always wear eye protection and gloves when working with cell cultures. Aseptically vent any nitrogen from cryopreserved vials in a bio-safety cabinet prior to thawing the vials in a water bath. If vials must be stored in liquid phase, the vials should be transferred to vapor phase storage or -80°C for up to 24 hours prior to being thawed. Cell culture medium should be stored between 2-8°C.

PRODUCT INFORMATION:	
Part #	Description
<a href="#">HC-0008</a>	HP <sup>2</sup> Heps™ 10 , Human Pooled Primary Hepatocytes, 10 Donor Pool – 5 X 10 <sup>6</sup> cells
<a href="#">HC-0009</a>	HP <sup>2</sup> Heps 20 , Human Pooled Primary Hepatocytes, 20 Donor Pool – 5 X 10 <sup>6</sup> cells
<a href="#">LS-1082</a>	Lifeline HuHep Reanimation Kit - Sufficient reagents to reanimate, wash, and check viability for a volume of 4 mL of cryopreserved hepatocytes. <ul style="list-style-type: none"><li>• LM-0028 HuHep Reanimation Tube A 40 mL</li><li>• LM-0029 HuHep Resuspension Medium 40 mL</li><li>• Diluted Trypan blue 450 µL</li></ul>
<a href="#">LM-0029</a>	Lifeline HuHep Resuspension Medium- 40 mL (DMEM containing: FBS; Insulin and Hydrocortisone)
<a href="#">LM-0030</a>	Lifeline HuHep Culture Medium – 100 mL (Modified Chee's medium; Dexamethasone; Insulin; Transferrin; Selenium)
<a href="#">LM-0031</a>	Lifeline HuHep Incubation Medium – 50 mL (Waymouth's medium containing: Dexamethasone; FBS; Insulin; Na <sup>+</sup> Pyruvate; L-Glutamine)

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