



PRIMARY HUMAN CRYOPRESERVED HEPATOCYTES

HEPATOCELLS
HUMAN



HEPATOCELLS USES FOR RESEARCH

Metabolism studies

Drugs development

Toxicity studies

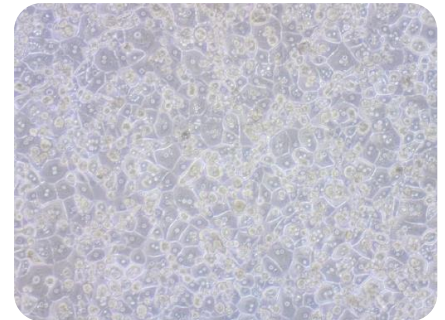
Enzymatic activity

Primary Human Hepatocytes are produced under rigorous QC Standards and supplied with:

- Demographic and clinical donor profile
- Viability and morphology assessment
- Extensive characterization
- Thawing and culture protocols

Categories:

- HuCS:** Suspension
- HuCPM:** Metabolism Certified
- HuCPI:** Induction Certified
- HuCPT:** Induction and Transporters Certified



Morphology: Hepatocytes plated at 24h

Shipping conditions: -196°C
(LN2 vapor container)

Media Available: Thawing (MHT), Plating (MHP), Maintenance (MHM)

PLATEABLE HEPATOCYTES – Analysis Certificate

Plateable Hepatocytes are characterized for **CYP450** drug-metabolizing enzyme activity (Phase I), UGT & SULT activities (Phase II), and transporters.

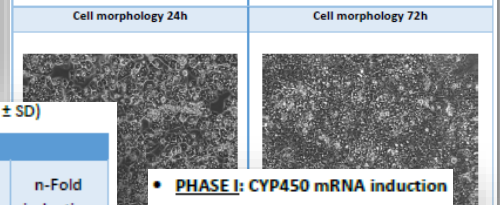
DONOR DEMOGRAPHICS

Species	Sex	Race	Age	BMI	Smoker	Alcohol Use	Drug Use
Human	Male	Caucasian	69	23	No	No	No

Pathology	Medication	Serological Data
Colorectal cancer hepatic metastases	Enalapril	Tested negative less than 3 months before surgery

Post Thaw Lot information

Number of viable cells/vial: 5.6 ± 0.2 * 10 ⁶ (n=2)	Monolayer assessment* Plateability: YES Seeding density in 24 well recommended: 0.3 * 10 ⁶ cells/well in 0.5 ml
Post-thaw viability (%): 92.6 ± 2.2 (n=2)	



• PHASE I: CYP ACTIVITIES EXPRESSED IN pmol/min/mg protein (mean ± SD)

Enzyme	Induction (Specific Activity)			
	Basal Activity (pmol/min/mg protein) on day 1	Basal Activity (pmol/min/mg protein) on day 3	Induced Activity (pmol/min/mg protein) on day 3	n-Fold induction
CYP1A2	9.83 ± 2.39	3.50 ± 0.07	352.00 ± 1.69	100.5
CYP2B6	0.56 ± 0.06	1.7		
CYP3A4/5	5.75 ± 1.86	2.3		

• PHASE I: CYP450 mRNA induction

CYP (mRNA)	n-Fold Induction
CYP1A2	328
CYP2B6	22
CYP3A4/5	945

• PHASE II: UGTs AND SULT ACTIVITIES 24h AFTER SEEDING EXPRESSED IN pmol/min/mg PROTEIN

Enzyme	CONJUGATE	pmol/min/mg
UGT	7-OH coumarin glucuronide	158.17 ± 2.36
SULT	7-OH coumarin sulfate	18.86 ± 0.70

✓ Access to **Specific Donor demographics**

✓ Assured **Minimum Yield & Viability** per vial

✓ Available: **Thawing & Culture protocols** and media

✓ **Technical Customer Service**

SUSPENSION HEPATOCYTES – Analysis Certificate

Hepatocytes in Suspension are provided with basal enzymatic activity and viability over time assessment.

Common uses:

- Metabolic stability
- Phenotyping
- CYP inhibition
- Uptake transporters

DONOR DEMOGRAPHICS

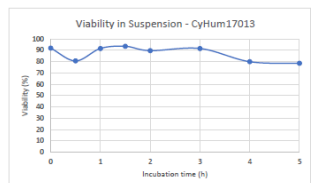
Species	Sex	Race	Age	BMI	Smoker	Alcohol Use
Human	Male	Caucasian	69	23	No	No

Pathology	Medication	Serological Data
Colorectal cancer hepatic metastases	Enalapril	Tested neg months

Post Thaw Lot information

Number of viable cells/vial: 5.0 ± 2.4 x 10 ⁶
Post-thaw viability (%): 87 ± 1.4

Time (h)	0	0.5	1	1.5	2	3	4	5
Viability (%)	92	80.7	91.7	93.6	89.7	91.7	80.0	79.6



Enzyme Activity	
Isoforms	Activity (pmol/min/mg protein)
CYP1A2	38.04 ± 0.95
CYP2B6	39.77 ± 0.07
CYP3A4/5	1.11 ± 0.09

For more information visit our **Website or Contact us!**

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