

HHCP-I-3D Human Hepatocytes Cryopreserved Plateable for induction assays and for 3D culture
Cell Specification – Certificate of Analysis (CoA)

Lot cPHH250625489

Batch Release: April 29, 2026

Donor data

Species: Human
Ethnicity: not stated

Gender: male
Age: 63 years
Smoker: ex-smoker (15 c./day)

Diagnosis: Colorectal liver metastases
Medical History: Hypertension, type 2 diabetes, dyslipidaemia, gout, central line clot in external jugular, colon cancer
Chemotherapy: CAPOX 6 cycles, Folfiri 14 cycles

Therapy: Laparotomy with resection of segments V/VI
Medication: Amlodipine, Metformin, Allopurinol, Heparin
Serology: negative for HBV, HCV, HIV1/2

Cryopreservation and Thawing

Cryopreservation:

Date: June 25, 2025
Amount per vial: 10.0 x 10⁶ cells

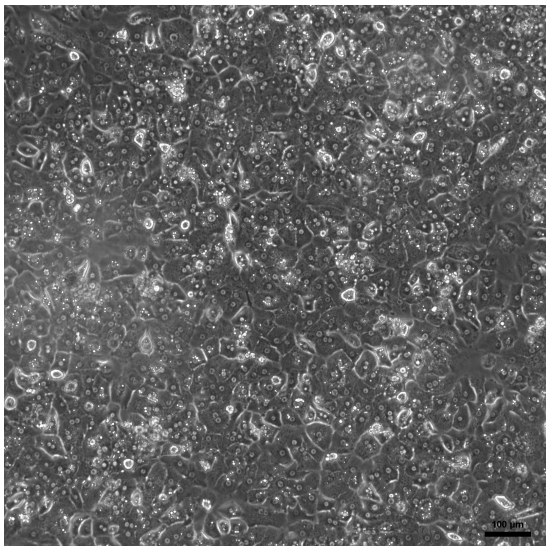
Thawing: n=1

Post-thaw viability: 95.4 %
Post-thaw yield per vial: 3.4 x 10⁶ cells
Recovery: 34 %

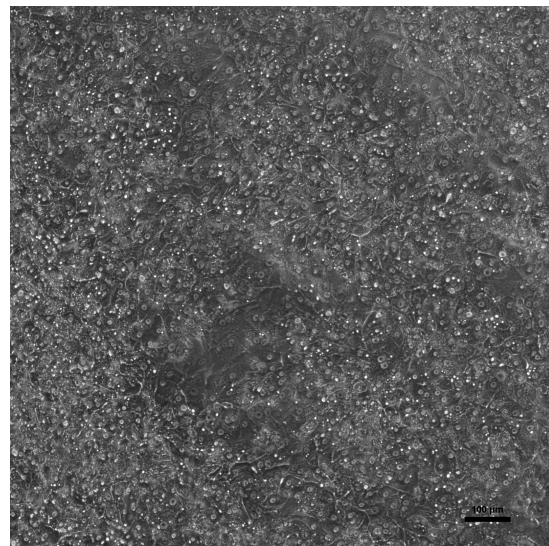
Only one spin required. No washing step.

2D culture

Phase contrast on day 1 after thawing
(24well plate)



Phase contrast on day 4 after thawing
(24well plate)



Recommended seeding density on collagen-coated plates:
24well plate – 350,000 cells/well // 96well plate – 90,000 cells/well,
Culture in Human Hepatocyte Maintenance Medium (HHMM).

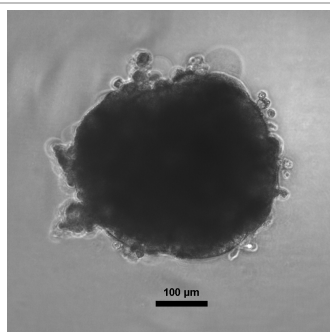
Note: Gently shake the plate (N/S-E/W) every 30 minutes for 2 hours after plating (only 24well plate and bigger wells). This step has a positive effect on the uniform plating.

CYP P450 activity in 2D culture after thawing:	pmol/(mg × min)	X-fold induction
Ethoxyresorufin-O-deethylation:	24well: 9.6 ± 0.8	4.0
Induction with 25 µM β-Naphthoflavone for 3 d	96well: 10.6 ± 1.4	3.3

3D culture

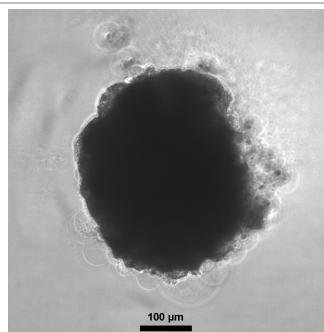
Cells seeded in 96well ULA round bottom plates (FaCellitate), 2,500 cells/well

day 7



scale bar 100 µm

day 11



scale bar 100 µm

Suspension culture

Viability test on orbital shaker (Eppendorf Thermomixer C, 1000 rpm at 37 °C with 0.5 × 10⁶ cells in 0.5 mL HPM-Cryo):

Time (h)	0	1	2	3	4	5
Viability (%)	95.4	93.3	90.8	93.7	92.9	90.5

Note: Yield, viability, recovery and activity assays were performed at PRIMACYT using PRIMACYT's manual for thawing, plating and culture of primary cryopreserved hepatocytes.

Note for thawing process: Only one spin at 100 x g, 10 min., 20 °C is required. No washing step needed.

Store at -150 °C or in the vapour phase of LN₂

This product should be considered as potential biohazard. Only intended for *in vitro* use.

Issued by: A. Ullrich

Verified by: T. Krimmling