

HHCP-I-3D Human Hepatocytes Cryopreserved Plateable for Induction assays and for 3D culture

Cell Specification – Certificate of Analysis (CoA)

Lot HH251016

Batch Release: April 29, 2026

Donor data

Species: Human

Gender: female

Age: 39 years

Smoker: yes

Diagnosis: progressively enlarging space-occupying lesion

Therapy: Liver resection left

Medication: none

Serology: negative for HAV, HBV, HCV, HIV 1/2

Cryopreservation and Thawing

Cryopreservation:

Date: Oct 16, 2025

Amount per vial: 8.0×10^6 cells

Thawing: n=1

Post-thaw viability: 95.2 %

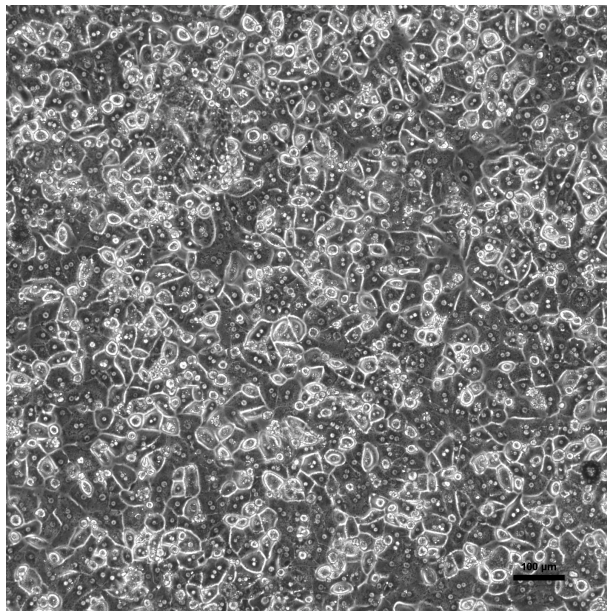
Post-thaw yield per vial: 4.9×10^6 cells

Recovery: 61 %

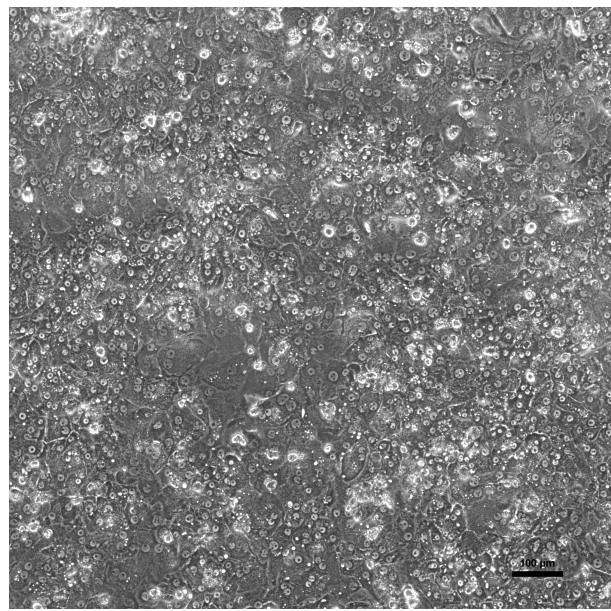
Only one spin required. No washing step.

2D culture

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



Phase contrast on day 3 after thawing
(24well plate)



Recommended seeding density on Corning collagen-coated plates:
24well plate – 300,000 cells/well // 96well plate – 70,000 cells/well.

Culture in Human Hepatocyte Maintenance Medium (HHMM).

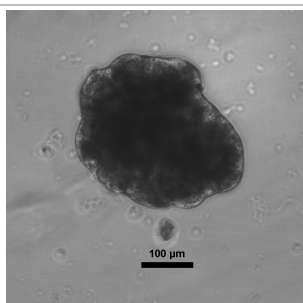
Note: Gently shake the plate (N/S-E/W) every 30 minutes for 2 hours after plating (only 24well plate and bigger wells). This step has a positive effect on the uniform plating.

CYP P450 activity in 2D culture after thawing:	pmol/(mg × min)	X-fold induction
Ethoxyresorufin-O-deethylation:	24well: 13.2 ± 1.0	5.4
Induction with 25 µM β-Naphthoflavone	96well: 13.5 ± 6.2	5.1

3D culture

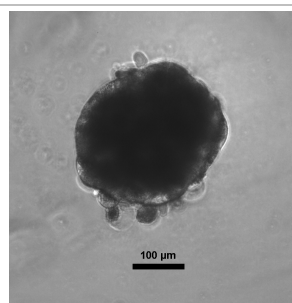
Cells seeded in 96well ULA round bottom plates (FaCellitate), 2,500 cells/well

day 7



scale bar 100 µm

day 10



scale bar 100 µm

Suspension culture

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

Time (h)	0	1	2	3	4	5
Viability (%)	95.2	87.1	87.6	90.1	87.4	90.7

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