

MHCP-I-3D Mouse Hepatocytes Cryopreserved Plateable for Induction assays and for 3D culture
Cell Specification – Certificate of Analysis (CoA)

Lot MH231113

Batch Release: May 08, 2024

Donor data

Species: Mouse (*Mus musculus*)
Strain: CD-1

Gender: male
Age: approx. 9 months

Cryopreservation and Thawing

Cryopreservation:

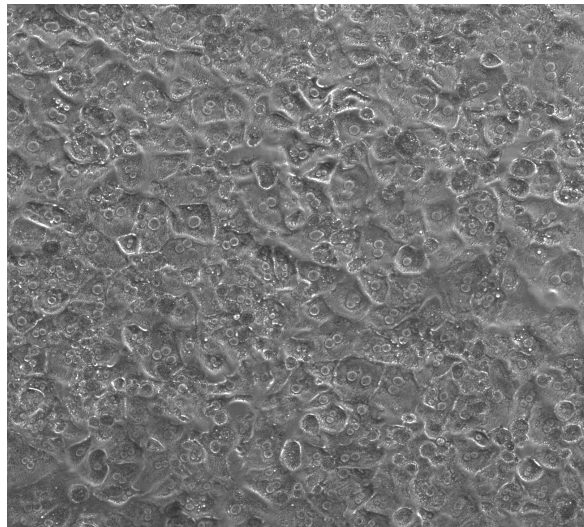
Date: Nov. 13, 2023
Amount per vial: 6.4×10^6 cells

Thawing: n=1

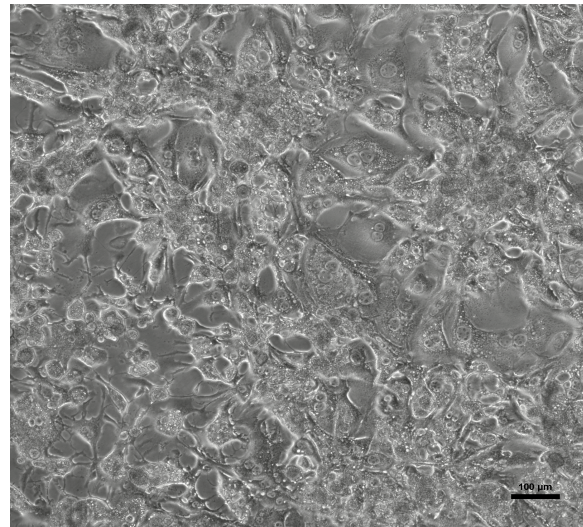
Post-thaw viability: 83.5 %
Post-thaw yield per vial: 2.0×10^6 cells
Recovery: 31.6 %

2D culture

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



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



Recommended seeding density on collagen-coated plates:

24well plate – 120,000 cells/well

Culture in Human Hepatocyte Maintenance Medium (HHMM).

CYP P450 activity in 2D culture after thawing:

pmol/(mg × min)

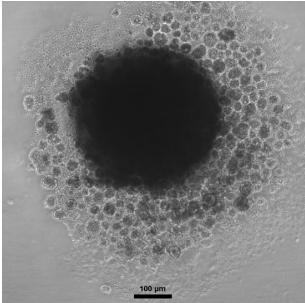
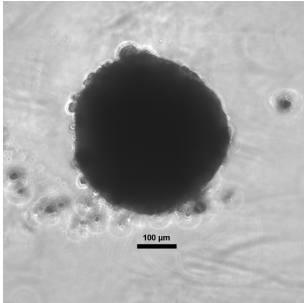
X-fold induction

Ethoxyresorufin-O-deethylation:

24well: 8.5 ± 0.27

4.7

Induction with 25 μM β-Naphthoflavone

3D culture	
Cells seeded in 96well ULA round bottom plates (FaCellitate), 2,500 cells/well Culture in 3D- Hepatocyte Maintenance Medium (3D-HMM)	
day 7	day 9
 <p style="text-align: center;">scale bar 100 µm</p>	 <p style="text-align: center;">scale bar 100 µm</p>

Suspension culture					
Viability test on orbital shaker (Eppendorf Thermomixer C, 1000 rpm at 37 °C with 0.5 x 10 ⁶ cells in 0.5 ml HPM-Cryo):					
Time (h)	0	1	2	3	4
Viability (%)	83.5	70.2	65.9	65.1	54.7
<p>Note: Yield, viability, recovery and activity assays were performed at PRIMACYT using PRIMACYT's manual for thawing, plating and culture of primary cryopreserved hepatocytes.</p> <p>Store at -150 °C or in the vapour phase of LN₂</p> <p>This product should be considered as potential biohazard. Only intended for <i>in vitro</i> use.</p>					

Detailed animal information and husbandry conditions	
Species	Mouse (Mus musculus)
Strain	CD-1, IGS (International Genetic Standard)
Vendor	Janvier Labs, Saint Berthevin Cedex, France
Food	Altromin Maintenance diet for rats/mice (ad libitum), Altromin, Lage, FRG
Water	ad libitum
Light/Dark cycle	regulated day/night cycle using artificial and natural light, 10-14 hours light daily
Temperature	20-24 °C
Humidity	40-70 %
Bedding	Hugro hemp bedding, Saerbeck, FRG

Cage	Tecniplast Eurostandard Type III and Type IV incl. behavioural enrichments for the animals
<p>Animals were housed under veterinary control and allowed to acclimate ≥ 7 days before use. Animal housing permits according to §11 Abs. 1 TSchG, dated March 22, 2022 under supervision of Veterinary Office of Landkreis Ludwigslust/Parchim, FRG. Hepatocytes were obtained from a non-infectious, non-contagious, healthy animal. The animal does not originate from a facility conducting work or research with animal pathogens.</p>	
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