

# CHCP-I-3D Cynomolgus Hepatocytes Cryopreserved Plateable for Induction assays and for 3D culture

**Cell Specification – Certificate of Analysis (CoA)** 

Lot CH220301 Batch Release: Sept 16, 2022; updated: Oct 21, 2022

#### **Donor data**

Species: Macaca fascicularis

Gender: male

Age: 2 years 4 months

The animals from which the samples were taken were examined and found healthy. The stock is under regular veterinarian surveillance. Bacteriological and parasitological controls are performed. Causes of death are determined regularly. All animals used come from veterinary controlled breeding in Mauritius. Mauritius animals are not tested for viruses like SIV, SRV, STLV+BV, as they are considered free of them due to their origin.

## **Cryopreservation and Thawing**

**Cryopreservation:** 

Date: March 1, 2022

Amount per vial: 10.1 x 10<sup>6</sup> cells

**Thawing:** n=1

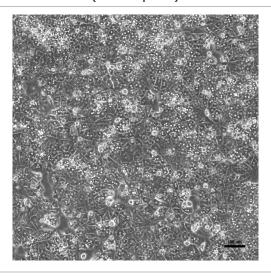
Post-thaw viability: 97.9 %

Post-thaw yield per vial: 5.6 x 10<sup>6</sup> cells

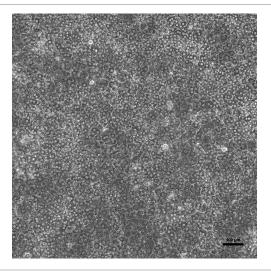
Recovery: 55 %

#### 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 – 300,000 cells/well // 96well plate – 70,000 cells/well Culture in Human Hepatocyte Maintenance Medium (HHMM).



CYP P450 activity in 2D culture after thawing: Ethoxyresorufin-O-deethylation:

Induction with 25  $\mu$ M  $\beta$ -Naphthoflavone

pmol/(mg  $\times$  min) 24well: 49.5  $\pm$  2.1

96well:  $72.2 \pm 10.9$ 

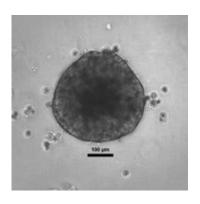
X-fold induction

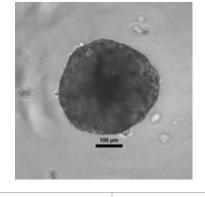
5.3 5.5

#### **3D** culture

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

day 4 day 7





CYP P450 activity in 3D culture after thawing: Ethoxyresorufin-O-deethylation: Induction with 3  $\mu$ M  $\beta$ -Naphthoflavone

 $pmol/(mg \times min)$ 

X-fold induction

 $6.1 \pm 2.4$ 

2.3

## **Suspension culture**

Viability test on orbital shaker (Eppendorf Thermomixer C, 1000 rpm at 37 °C with  $0.5 \times 10^6$  cells in 0.5 ml HPM-Cryo):

Time (h)	0	1	2	3	4	5
Viability (%)	97.9	97.8	95.8	95.6	97.4	96.9

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

# Store at -150 °C or in the vapour phase of LN<sub>2</sub>

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

Issued by: A. Ullrich Verified by: T. Krimmling