

Cryo Characterization Report (CCR)

| Lot Overview | | |
|--------------|---|----------------|
| Lot Number | Qualification | Catalog Number |
| HUM4113 | Cryopreserved human hepatocytes Plateable, induction qualified | HUCPI |

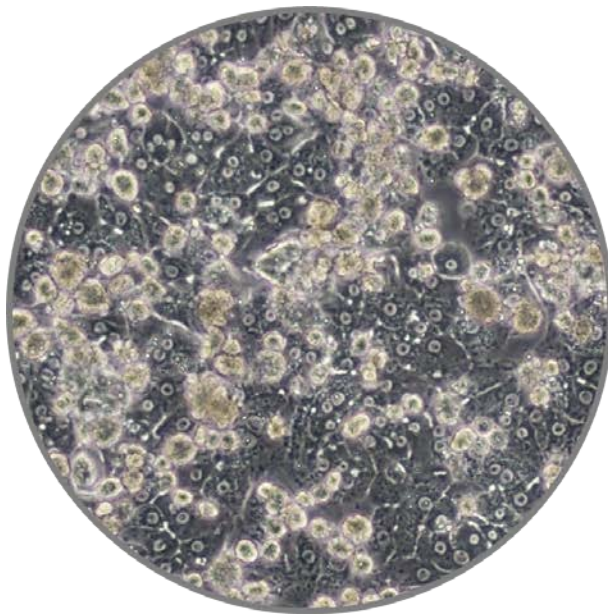
| Donor Demographics | | | | | | | | |
|--------------------|-----------|-----|------|-------------|-------------|----------|--------------------------|----------------|
| Sex | Race | Age | BMI | Tobacco Use | Alcohol Use | Drug Use | HIV, HBV, HCV Serologies | Cause of Death |
| Male | Caucasian | 29 | 27.5 | Yes | Yes | Yes | Negative | Anoxia |

Additional donor demographic information, including relevant medical and medication history, is available upon request

| Post-thaw Viability and Cell Quality Assessment | | | |
|---|-----------------------|-------------------------|------------------------------------|
| Thawing Medium Used | Centrifuge Conditions | % Viability (post-thaw) | Viable cell yield per vial |
| Cryopreserved Human Hepatocyte Thawing Medium | 100 x g for 8 min | 90% | 9.5 x 10 ⁶ viable cells |

| Monolayer Assessment | | | | | |
|---------------------------------|-------------------------------|-------------------------------|--------------------------------|-------------------------------|---|
| Plating Medium Used | Culture Medium Used | Time Change to Culture Medium | Optimal Seeding Density | Initial Attachment Efficiency | Monolayer Confluency after 96hrs in culture |
| Human Hepatocyte Plating Medium | Hepatocyte Maintenance Medium | 6hrs | 0.8 X 10 ⁶ cells/mL | 95% | 90% |

Characterization was completed in a 24-well collagen-coated plate with extra-cellular matrix overlay



HUM4113, 48hrs, 10X



HUM4113, 72hrs, 10X

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| <i>Induction</i> | | | |
|------------------|---------------------------|----------------------------------|--------------------------------|
| Isoforms | Control Inducer | Fold Induction Specific Activity | Fold Induction mRNA Expression |
| <i>CYP1A2</i> | <i>50µM Omeprazole</i> | <i>21.4</i> | <i>89.5</i> |
| <i>CYP2B6</i> | <i>1 mM Phenobarbital</i> | <i>21.9</i> | <i>18.8</i> |
| <i>CYP3A4</i> | <i>10µM Rifampicin</i> | <i>29.5</i> | <i>158.4</i> |

Cryopreserved human hepatocytes were thawed and plated on 24-well collagen I coated plates, overlaid with Matrigel[®], then dosed in triplicate with vehicle control (0.1% DMSO) or control inducers for 72 hours. The fold induction was calculated by dividing the induced level by the vehicle control level.

Media products used for characterization:

MCHT50 – Cryopreserved human hepatocyte thawing medium, 50mL

MP250 – Human hepatocyte plating medium, 250mL

MM250 – Hepatocyte maintenance medium, 250mL

Contact customer service to place an order or to obtain additional information on any of our cryopreserved primary hepatocyte lots.

To contact TRL:

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