

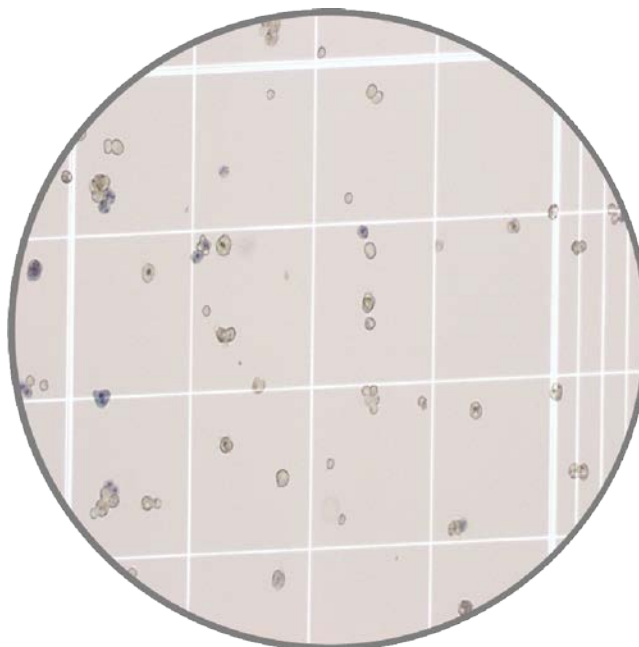
# Cryo Characterization Report (CCR)

Lot Overview		
Lot Number	Qualification	Catalog Number
HUP1000	Pooled human suspension, metabolism qualified	HUCS10P

Donor Demographics									
Lot Number	Sex	Race	Age	BMI	Tobacco Use	Alcohol Use	Drug Use	HIV, HBV, HCV Serologies	Cause of Death
HUM4031	Female	Caucasian	53	27.0	No	Social	No	Negative	Head Trauma
HUM4035	Female	Caucasian	51	33.0	No	Social	No	Negative	Stroke
HUM4050	Female	Caucasian	42	29.1	No	No	No	Negative	Heart Attack
HUM4054	Female	Caucasian	23	31.0	Yes	Yes	Yes	Negative	Heart Attack
HUM4065	Female	African American	66	15.0	Yes	Social	No	Negative	Stroke
GC4009	Male	Caucasian	53	25.8	Yes	Social	No	Negative	Head Trauma
HUM4049	Male	Caucasian	35	28.5	No	Past Use	No	Negative	Head Trauma
HUM4067	Male	African American	21	23.9	Yes	Social	Yes	Negative	Drug Overdose
HUM4069B	Male	Caucasian	30	25.0	No	No	No	Negative	GSW to Head
HUM4099	Male	Caucasian	37	26.0	No	Social	No	Negative	Head Trauma

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 - Pooled	200 x g for 10 min	90%	5.4 x 10 <sup>6</sup> viable cells



-HUP1000, Post-thaw, 10X

<i>Suspension Metabolism</i>			
Isoform	Substrate	Marker Metabolite	Activity pmol/min/10 <sup>6</sup> cells
CYP1A2	100 $\mu$ M Phenacetin	Acetaminophen	5.1
CYP2A6	5 $\mu$ M Coumarin	7-Hydroxycoumarin	TBD
CYP2B6	500 $\mu$ M Bupropion	Hydroxybupropion	12.2
CYP2C8	20 $\mu$ M Paclitaxel	6 $\alpha$ -Hydroxypaclitaxel	15.8
CYP2C9	25 $\mu$ M Diclofenac	4-Hydroxydiclofenac	103.1
CYP2C19	250 $\mu$ M Mephenytoin	4-Hydroxymephenytoin	3.5
CYP2D6	15 $\mu$ M Dextromethorphan	Dextrorphan	15.2
CYP2E1	250 $\mu$ M Chlorzoxazone	Hydroxychlorzoxazone	17.8
CYP3A4	200 $\mu$ M Testosterone	6 $\beta$ -Hydroxytestosterone	79
CYP3A4	8 $\mu$ M Midazolam	Hydroxymidazolam	29.5
General	100 $\mu$ M 7-Ethoxycoumarin	7-Hydroxycoumarin	856.7
SULT	100 $\mu$ M 7-Hydroxycoumarin	7-Hydroxycoumarin Sulfate	27.5
UGT	100 $\mu$ M 7-Hydroxycoumarin	7-Hydroxycoumarin Glucuronide	317.8

<i>Suspension Uptake</i>			
Test Article	Accumulation at 37°C (pmol/million cells)	Accumulation at 4°C (pmol/million cells)	Transporter Specific Accumulation (Fold)
MPP+	0.8	0.4	2.0
E3S	1.9	0.4	4.6
TCA	1.7	0.5	3.2

*Media products used for characterization:*

MCHT50P –Cryopreserved human hepatocyte thawing medium - pooled, 50mL

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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