

Cryo Characterization Report (CCR)

Lot Overview		
Qualification	Catalog Number	Quantity
Cryopreserved human hepatocytes, Plated Metabolism Qualified	HUCPM3	5.0 x10 ⁶ viable cells/vial

Donor Demographics								
Sex	Race	Age	BMI	Tobacco Use	Alcohol Use	Drug Use	Serological Data	Cause of Death
Male	Caucasian	54	29	1ppd x, 39 years	Rare	Past use, Marijuana	All Negative	CVA

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	86%	5.0 x10 ⁶

HepatoMeter report available upon request

Monolayer Assessment					
Plating Medium Used	Well Format	Culture Medium Used	Optimal Seeding Density	Initial Attachment Efficiency	Monolayer Confluency after 96hrs in culture
Human Hepatocyte Plating Medium	24-well	Hepatocyte Maintenance Medium	0.8x10 ⁶ /mL	90%	95%



HUM4012 24-well with Overlay, 24 hours 10X



HUM4012, 24-well with overlay, 48 hours 10X

Suspension Metabolism			
Isoform	Substrate	Marker Metabolite	pmol/min/10 ⁶ cells
CYP1A2	100 μ M Phenacetin	Acetaminophen	7.79
CYP2A6	5 μ M Coumarin	7-Hydroxycoumarin	3.02
CYP2B6	500 μ M Bupropion	Hydroxybupropion	2.09
CYP2C8	20 μ M Paclitaxel	6 α -Hydroxypaclitaxel	.75
CYP2C9	25 μ M Diclofenac	4-Hydroxydiclofenac	3.31
CYP2C19	250 μ M Mephenytoin	4-Hydroxymephenytoin	1.52
CYP2D6	15 μ M Dextromethorphan	Dextrophan	4.73
CYP2E1	250 μ M Chlorzoxazone	Hydroxychlorzoxazone	12.6
CYP3A4	200 μ M Testosterone	6 β -Hydroxytestosterone	45.5
CYP3A4	8 μ M Midazolam	Hydroxymidazolam	3.79
General	100 μ M 7-Ethoxycoumarin	7-Hydroxycoumarin	.71
SULT	100 μ M 7-Hydroxycoumarin	7-Hydroxycoumarin Sulfate	58.3
UGT	100 μ M 7-Hydroxycoumarin	7-Hydroxycoumarin Glucuronide	4.21

Suspension Uptake		
Substrate	Incubation Time (min)	Facilitated Active Uptake (pmol/min/10 ⁶ cells)
1-Methyl-4-phenylpyridinium Iodide (MPP+)	3	1.42
Taurocholate	1	4.51
Estrone sulfate	1	8.07

Plated Metabolism (Intrinsic Clearance)			
Isoforms	Substrate	Incubation Times (Hours)	Intrinsic Clearance (CL _{int}) (μ L/min/10 ⁶ cells)
CYP2C9	1 μ M Tolbutamide	0, 1, 2, 4, 6, 8	0
CYP2D6	1 μ M Dextromethorphan	0, 1, 2, 4, 6, 8	1.71
CYP3A4	0.5 μ M Midazolam	0, 4, 6, 8, 18, 24	4.29

Genotyping													
CYP2C9			CYP2C19			CYP2D6				CYP3A5			OATP1B1
*2	*3	*6	*2	*3	*6	*3	*4	*6	*9	*3	*6	*8	*3
-	-	-	-	-	-	-	N/A	-	-	-	-	-	N/A

- indicates negative result for SNP

Contact customer service to place an order or to obtain additional information on any of our lots. This may include supplementary donor demographic information, current inventory, and photomicrographs at multiple timepoints and magnifications.

To contact TRL:

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