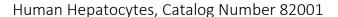
Product Characterization Sheet HH1061





Classification

Plateability	Suspension	
Number of days plateable	NA	
Confluency P450 Inducibility	NA	
	NA	
Transporter activity	NA	
Number of donors	1	

Post-thaw Viability and Yield

Viability	89 %	
Yield	4.0 million	

Donor Demographics

Gender	Male		
Age	20 years		
Race	Caucasian		
Cause of death	Head trauma		
BMI	24.1		
Smoking	Yes		
Alcohol	Yes		
Substance abuse	Yes		
Medical history	NA		
Infectious diseases	HBV-, HCV-, CMV-, HIV-		

<u>Characterization:</u> Hepatocytes were thawed using 37°C UCRMTM and centrifuged for 10 minutes at 100g. After removing the supernatant, hepatocytes were re-suspended in 4°C HQMTM and counted for viability and yield using the Trypan Blue exclusion method.

Drug Metabolism Activity

Drug Metabolizing Enzyme	Substrate (μΜ)	Incubation Time (minutes)	Metabolite Quantified	Activity (pmol/minute/million cells)
CYP1A2	Phenacetin (100)	15	Acetaminophen	38.2
CYP2A6	Coumarin (50)	30	7-Hydroxycoumarin	50.6
CYP2B6	Bupropion (500)	15	Hydroxybupropion	22.5
CYP2C8	Paclitaxel (20)	15	6α-Hydroxypaclitaxel	8.4
CYP2C9	Diclofenac (25)	15	4-Hydroxydiclofenac	35.3
CYP2C19	S-Mephenytoin (250)	30	4-Hydroxymephenytoin	7.9
CYP2D6	Dextromethorphan (15)	15	Dextrorphan	12.8
CYP2E1	Chlorzoxazone (250)	15	6-Hydroxychlorzoxazone	14.5
CVD2 A 4	Midazolam (20)	10	1-Hydroxymidazolam	11.2
CYP3A4	Testosterone (200)	15	6β-Hydroxytestosterone	239.3
ECOD	7-Ethoxycoumarin (100)	30	7-Hydroxycoumarin	61.4
UGT	7-Hydroxycoumarin (100)	30	7-Hydroxycoumarin glucuronide	122.6
Sulfotransferase	7-Hydroxycoumarin (100)	30	7-Hydroxycoumarin sulfate	23.0

<u>CYP450 Activity Assessment:</u> The hepatocytes were incubated at a cell density of 0.5 million cells/mL in a 48-well plate (125,000 hepatocytes/well) for the designated time durations with isoform-selective substrates. The metabolites were identified and analyzed using LC-MS/MS.

IVAL cell culture media and tissue culture plates used in this evaluation:

- Recovery of thawed hepatocytes Cat. No. 81015 UCRM™ Universal Cryopreservation Recovery Media, 50 mL tube
- Suspension and incubation of hepatocytes Cat. No. 81039/81040 HQM™ Hepatocyte Incubation Media, 50 mL tube/500 mL bottle

To inquire about our products and services or for technical questions please contact:

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