

Product Characterization Sheet

MCE3024

Mouse Enterocytes, Catalog Number 82098



In Vitro ADMET
Laboratories, LLC

Classification

Suspension	X
Metabolism	X
Confluency	Not Plateable
Number of Donors	5

Donor Demographics

Gender	Male
Strain	CD-1
Age	8-12 weeks, 30-35 g
Infections/Diseases	Negative

Post-thaw

Viability	79 %
Yield	2.0 million

Characterization: Enterocytes were thawed using 37°C CERM™ and centrifuged for 10 minutes at 100g. After removing the supernatant, enterocytes were re-suspended in 4°C HQM™ and counted for viability and yield using the Trypan Blue exclusion method.

Drug Metabolism Activity

Enzyme	Metabolite Measured	Activity pmol/million cells/min
CYP3A4	1-hydroxymidazolam	0.05
CYP2J2	O-Demethyl Astemizole	0.17
CES2	SN38	0.97
CYP2C9	4-hydroxydiclofenac	0.01
CYP2C19	4'-hydroxymephenytoin	TBD
Sulfotransferase	7-Hydroxycoumarin Sulfate	0.94
UGT	7-Hydroxycoumarin Glucuronide	1.01

CYP450 Activity Assessment: The enterocytes were incubated at a cell density of 1.5 million enterocytes/mL in a 96-well plate (150,000 enterocytes/well) for the designated time duration of 2 hours with isoform-selective substrates. The metabolites were identified and analyzed using API 3000 mass spectrometer connected to Agilent 1100 series HPLC.

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

- Recovery of thawed enterocytes - Cat. No. 81056 - CERM™ Cryopreserved Enterocyte Recovery Media, 50 mL tube
- Suspension and incubation of enterocytes - Cat. No. 81039 - HQM™ Hepatocyte and Enterocyte Incubation Media, 50 mL tube

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

- In Vitro ADMET Laboratories by phone at +1 (866) 458-1094 or +1 (410) 869-9037 or email at info@invitroadmet.com