

Product Characterization Sheet

RSE3023

Rat Enterocytes, Catalog Number 82099



Classification

Suspension	X
Metabolism	X
Confluency	Not Plateable
Number of Donors	6

Donor Demographics

Gender	Male
Strain	Sprague Dawley
Age	8-12 weeks, 200-250 g
Infections/Diseases	Negative

Post-thaw

Viability	58 %
Yield	1.1 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	TBD
CYP2J2	O-Demethyl Astemizole	0.91
CES2	SN38	1.65
CYP2C9	4-hydroxydiclofenac	0.00
CYP2C19	4'-hydroxymephenytoin	TBD
Sulfotransferase	7-Hydroxycoumarin Sulfate	0.32
UGT	7-Hydroxycoumarin Glucuronide	0.80

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