

M1000.P Lot No. 2310281

CD1 Mouse Lung Microsomes

Untreated, Male, Pool of 800

0.5 mL at 10 mg protein / mL

Suspension medium: 250 mM sucrose

Enzyme Activities		Rate
NADPH-cytochrome c reductase	(nmol/mg protein/min)	119 ± 3
Phenacetin O-dealkylation	(pmol/mg protein/min)	82.5 ± 6.5
7-Ethoxyresorufin O-dealkylation	(pmol/mg protein/min)	5.80 ± 0.25
Glucuronidation of 4-Methylumbelliferone	(nmol/mg protein/min)	28.1 ± 1.8

Values for enzyme activities were determined at a single substrate concentration and are mean ± standard deviation of three or more determinations.

To measure cytochrome P450 (CYP) activity, lung microsomes (0.1 mg/mL) were incubated in triplicate at 37 ± 2°C for 10 minutes in potassium phosphate buffer (50 mM, pH 7.4), containing MgCl₂ (3.0 mM), EDTA (1.0 mM), NADP (1.0 mM), glucose-6-phosphate (5.0 mM), glucose-6-phosphate dehydrogenase (1 Unit/mL) and Phenacetin (80 µM), at the final concentrations indicated. Metabolite formation was determined by validated LC-MS/MS methods with deuterated metabolites as internal standards.

To measure UDP-glucuronosyltransferase (UGT) activity, lung microsomes (0.2 mg/mL) were incubated in triplicate at 37 ± 2°C for 10 minutes in Tris-HCl (100 mM, pH 7.7 at 37°C), CHAPS (0.5 mM), EDTA (1.0 mM), MgCl₂ (10 mM), D-saccharic acid 1,4-lactone (100 µM), uridine diphosphate-glucuronic acid (8.0 mM) and 4-methylumbelliferone (1 mM), at the final concentrations indicated. Metabolite formation was determined by validated LC-MS/MS methods with deuterated metabolites as internal standards.

Animal Information

Species: Mouse
 Strain: CD1
 Sex: Male
 Age: ~11 weeks
 Vendor: Charles River, Raleigh, NC

Animals were housed in an AAALAC-accredited facility and allowed to acclimate ≥ seven days before use.

Food: Purina 5L79 (*ad libitum*)
 Water: Automatic watering system (*ad libitum*)
 Light/dark cycle: 5:00 am - 5:00 pm, light; 5:00 pm - 5:00 am, dark (12-hour light/dark)
 Temperature: 70°F ± 2°F
 Humidity: 30-70 %
 Cage: Beta Chip (hardwood), NEPCO, Warrensburg, NY



Store at -80°C

CAUTION: This sample should be considered as a potential biohazard and universal precautions should be followed. Intended for *in vitro* use only.

These data were generated by and are the property of XenoTech. These data are not to be reproduced, published or distributed without the express written consent of XenoTech.

This data sheet serves as a Certificate of Analysis and has been approved by **Stephanie Helmstetter, Assistant Director.**
 Signature and Date: Stephanie Helmstetter 01 November 2023