

## R1000.I Lot No. 1510219

Sprague Dawley (SD) Rat Intestine Microsomes

Untreated, Male, Pool of 100

150  $\mu$ L at 10 mg protein / mL

Suspension medium: 250 mM sucrose

<b>Enzyme Activities</b>		<b>Rate</b>
NADPH-cytochrome c reductase	(nmol/mg protein/min)	47.3 $\pm$ 3.1
Testosterone 6 $\beta$ -hydroxylation	(pmol/mg protein/min)	121 $\pm$ 10
Glucuronidation of 4-Methylumbelliferone	(nmol/mg protein/min)	124 $\pm$ 10

Characterization is performed when the first lot of a product from a given subcellular fraction (e.g., S9) is prepared. Subsequent lots are subject to a verification test only. Values for enzyme activities were determined at a single substrate concentration and are mean  $\pm$  standard deviation of three or more determinations.

Aprotinin, Leupeptin, and Phenylmethylsulfonyl-fluoride were used in the preparation of these microsomes. Subcellular fractions were prepared from duodenal and jejunal tissue.

To measure cytochrome P450 (CYP) activity, intestine microsomes (0.1 mg/mL) were incubated in triplicate at 37  $\pm$  1°C for 10 minutes in potassium phosphate buffer (50 mM, pH 7.4), containing MgCl<sub>2</sub> (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 testosterone (250  $\mu$ M), 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, intestine microsomes (0.2 mg/mL) were incubated in triplicate at 37  $\pm$  1°C for 10 minutes in Tris-HCl (100 mM, pH 7.7 at 37°C), CHAPS (0.5 mM), EDTA (1.0 mM), MgCl<sub>2</sub> (10 mM), D-saccharic acid 1,4-lactone (100  $\mu$ M), 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: Rat  
 Strain: International Genetic Standard (IGS), Sprague Dawley  
 Sex: Male  
 Age: ~8 weeks  
 Vendor: Charles River, Raleigh, NC

Animals were housed in an AAALAC-accredited facility and allowed to acclimate  $\geq$  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  $\pm$  2°F  
 Humidity: 30-70 %  
 Bedding: Beta Chip (hardwood), NEPCO, Warrensburg, NY  
 Cage: Polycarbonate Shoebox Cage, conventional cage



## 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.

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Datasheet prepared 12 October 2015