

## H0610.I Lot No. 2110027

Human Intestine Microsomes

Mixed Gender, Pool of 13

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

Suspension medium: 250 mM sucrose

Enzyme Activities		Rate
NADPH-cytochrome c reductase	(nmol/mg protein/min)	37.5 $\pm$ 1.3
Testosterone 6 $\beta$ -hydroxylation	(pmol/mg protein/min)	1600 $\pm$ 90
Midazolam 1'-hydroxylation	(pmol/mg protein/min)	340 $\pm$ 25
Glucuronidation of 4-Methylumbelliferone	(nmol/mg protein/min)	13.4 $\pm$ 1.6

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.

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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.



### 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 16 April 2021

## Donor Information

Sample	Gender	Age (Yrs)	Race	Cause of Death
157	M	57	Caucasian	Anoxia
158	M	58	Caucasian	Head trauma
159	F	49	Caucasian	Cerebrovascular accident
160	M	54	Hispanic	Head trauma
162	M	65	Caucasian	Anoxia
163	M	28	African American	Anoxia
164	F	43	Caucasian	Anoxia
166	F	58	Caucasian	Cerebrovascular accident
167	M	64	Caucasian	Anoxia
168	F	53	African American	Head trauma
169	M	52	Caucasian	Head trauma
170	F	62	Caucasian	Head trauma
171	F	19	Caucasian	Head trauma

### **Serology information**

- Cytomegalovirus: 8 donors tested positive.
- RPR\*: All donors tested negative.
- HIV, HbsAg, and HCV\*\*: All donors tested negative.

\* Rapid Plasma Reagin

\*\* Antibody to Human Immunodeficiency Virus, Hepatitis B Surface Antigen, Antibody to Hepatitis C Virus, respectively.

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