

H0610.RS9 Lot No. 1610087

Human Kidney S9 Mixed Gender, Pool of 8 1.0 mL at 5 mg protein / mL Suspension medium: 50 mM Tris-HCI, 150 mM KCI, 2 mM EDTA

Enzyme Activities		Rate
NADPH-cytochrome <i>c</i> reductase	(nmol/mg protein/min)	10.6 ± 0.3
Lauric Acid 12-hydroxylation	(pmol/mg protein/min)	61.5 ± 4.7
Glucuronidation of 4-Methylumbelliferone	(nmol/mg protein/min)	18.8 ± 1.1

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.

To measure cytochrome P450 (CYP) activity, kidney microsome samples (0.2 mg/mL) were incubated in triplicate at $37 \pm 1^{\circ}$ 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 lauric acid (100 μ 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, kidney microsome samples (0.2 mg/mL) were incubated in triplicate at $37 \pm 1^{\circ}$ C for 10 minutes in Tris-HCI (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 μ 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.

Subcellular fractions were prepared from whole kidney.





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 06 July 2016

Donor Information

Sample	Gender	Age (Yrs)	Race	Cause of Death
20	М	45	Hispanic	Anoxia
25	F	42	Caucasian	Head Trauma
26	М	53	Hispanic	Cerebrovascular accident
28	М	56	Caucasian	Anoxia
29	F	58	African American	Anoxia
30	F	56	Caucasian	Anoxia
31	F	54	African American	Anoxia
32	F	58	Caucasian	Anoxia

Serology information

- Cytomegalovirus: 7 donors tested positive.
- RPR*: All donors tested negative.
- HIV, HTLV, HbsAg, and HCV**: All donors tested negative.
- * Rapid Plasma Reagin
- ** Antibody to Human Immunodeficiency Virus, Antibody to Human T Cell Lymphotropic Virus, Hepatitis B Surface Antigen, Antibody to Hepatitis C Virus, respectively.

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