

XTreme 200

H2610.C Lot No. 1210404

1.0 mL at 10mg/mL

Human Liver Cytosol

Pool of 200 (100 Male and 100 Female)

Suspension medium: 50 mM Tris-HCl, 150 mM KCl, 2 mM EDTA

Enzyme Activities		Rate
Phthalazine oxidation	(pmol/mg protein/min)	1000
Sulfamethazine N-acetylation	(pmol/mg protein/min)	248 ± 6
7-Hydroxycoumarin sulfonation	(pmol/mg protein/min)	401 ± 72

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

To measure aldehyde oxidase (AO) activity, liver cytosol samples (0.05 mg/mL) were incubated in triplicate at 37 ± 1°C for 1 minute in potassium phosphate buffer (50 mM, pH 7.4) and phthalazine (25 µM), at the final concentrations indicated. Metabolite formation was determined by validated LC-MS/MS methods with deuterated metabolites as internal standards.

To measure N-acetyltransferase 2 (NAT2) activity, liver cytosol samples (0.5 mg/mL) were incubated in triplicate at 37 ± 1°C for 10 minutes in potassium phosphate buffer (50 mM, pH 7.4), MgCl₂ (3 mM), EDTA (1 mM), dithiothreitol (2 mM), acetyl-DL-carnitine (4.5 mM), carnitine acetyltransferase (0.1 Units/mL), acetyl-CoA (0.1 mM), and sulfamethazine (600 µM), at the final concentrations indicated. Metabolite formation was determined by validated LC-MS/MS methods with deuterated metabolites as internal standards.

To measure sulfotransferase activity (SULT), liver cytosol samples (0.2 mg/mL) were incubated in triplicate at 37 ± 1°C for 10 minutes in potassium phosphate buffer (50 mM, pH 7.4), MgCl₂ (3 mM), EDTA (1 mM), adenosine 3'-phosphate 5'-phosphosulfate lithium salt hydrate (10 mM) and 7-hydroxycoumarin (500 µM), at the final concentrations indicated. Metabolite formation was determined by validated LC-MS/MS methods with deuterated metabolites as internal standards.

Each donor is equally represented in this pool

Donor Information

Gender:	Males (100), Females (100)
Age:	11-77 years of age
Race:	Caucasian (172), African American (9), Hispanic (16), Asian (3)
Cause of Death:	Anoxia (59), Head trauma (46), Cerebrovascular accident (95)
Cytomegalovirus (CMV):	Positive (110), Negative (88), Unknown (2)

All donors tested negative for Human Immunodeficiency Virus (HIV), Hepatitis B Surface Antigen (HBsAg), Hepatitis C Virus, and Rapid Plasma Reagin.



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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