

H0610.PS9(NS) Lot No. 2310048

Human Lung S9 Fraction (Non-Smoker)

Mixed Gender, Pool of 4

1.0 mL at 5 mg protein / mL

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

Enzyme Activities		Rate
NADPH-cytochrome c reductase	(nmol/mg protein/min)	8.92 ± 0.37
7-Ethoxyresorufin O-dealkylation	(pmol/mg protein/min)	0.68 ± 0.06
Phenacetin O-dealkylation	(pmol/mg protein/min)	<2.0
Glucuronidation of 4-Methylumbelliferone	(nmol/mg protein/min)	<0.1

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 ± standard deviation of three or more determinations.

To measure cytochrome P450 (CYP) activity, lung S9 samples (0.2 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 S9 samples (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.

Donor Information

Sample	Gender	Age (Yrs)	Race	Cause of Death	Smoked within past 10 years?
25	F	49	Caucasian	Head Trauma	No
31	F	10	African American	Head Trauma	No
39	M	65	Caucasian	Head Trauma	No
40	M	23	Caucasian	Anoxia	No

Serology Information

Antibody to Cytomegalovirus (CMV): Positive (2), Negative (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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This data sheet serves as a Certificate of Analysis and has been approved by **Stephanie Helmstetter, Assistant Director.**
 Signature and Date: Stephanie Helmstetter 10 March 2023