

H0610.PS9(S) Lot No. 2310304

Human Lung S9 Fraction (Smoker)

Mixed Gender, Pool of 4

1.0 mL at 5 mg protein / mL

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

Enzyme Activities		Rate
NADPH-cytochrome c reductase	(nmol/mg protein/min)	5.40 ± 0.00
7-Ethoxyresorufin O-dealkylation	(pmol/mg protein/min)	1.17 ± 0.07
Phenacetin O-dealkylation	(pmol/mg protein/min)	3.12 ± 0.16

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 (0.075 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 7-ethoxyresorufin (10 µM), at the final concentrations indicated. Metabolite formation was determined fluorimetrically.

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.

Donor Information

Sample	Gender	Age (Yrs)	Race	Cause of Death	Smoked within past 10 years?
21	F	27	Caucasian	Cerebrovascular Accident	Yes
27	M	59	Caucasian	Cerebrovascular Accident	Yes
36	M	57	Caucasian	Anoxia	Yes
38	F	57	Caucasian	Cerebrovascular Accident	Yes

Serology information

- Cytomegalovirus: 2 donors tested positive.
- RPR, 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.



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.

These data were generated by and are the property of XenoTech. These data are not to be reproduced, published or distributed without the express written consent of XenoTech.

This data sheet serves as a Certificate of Analysis and has been approved by Stephanie Helmstetter, Assistant Director.

Signature and Date: Stephanie Helmstetter 01 November 2023