

## H0610.P(NS) Lot No. 2310049

Human Lung Microsomes (Non-Smoker)

Mixed Gender, Pool of 4

0.5 mL at 10 mg protein / mL

Suspension medium: 250 mM sucrose

| Enzyme Activities                        |                       | Rate        |
|--|-----------------------|-------------|
| NADPH-cytochrome c reductase             | (nmol/mg protein/min) | 34.5 ± 0.3  |
| 7-Ethoxyresorufin O-dealkylation         | (pmol/mg protein/min) | 0.40 ± 0.05 |
| Phenacetin O-dealkylation                | (pmol/mg protein/min) | <2.0        |
| Glucuronidation of 4-Methylumbelliferone | (nmol/mg protein/min) | <0.1        |

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 microsomes (0.1 mg/mL) were incubated in triplicate at 37 ± 2°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 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 microsomes (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), MgCl<sub>2</sub> (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

**Anitbody 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