

D1000.PS9 Lot No. 1210095

Beagle Dog Lung S9 Fraction

Untreated, Male, Pool of 5

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)	4.33 ± 0.28
7-Ethoxyresorufin O-dealkylation	(pmol/mg protein/min)	11.3 ± 1.0
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 S9 samples (0.075 mg/mL) were incubated in triplicate at 37 ± 1°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 UDP-glucuronosyltransferase (UGT) activity, lung S9 samples (0.2 mg/mL) were incubated in triplicate at 37 ± 1°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.

Animal Information

Species: Dog; *Canis familiaris*
 Strain: Beagle
 Sex: Male
 Age: 10 months
 Vendor: Covance, Cumberland, VA

Animals were housed in an AAALAC-accredited facility and allowed to acclimate ≥ seven days before use.

Food: Nutrena (*ad libitum*)
 Water: Automatic watering system, tap water (*ad libitum*)
 Light/dark cycle: Not monitored
 Temperature: Ranges from 62°-82°F
 Humidity: Not monitored
 Cage: Indoor/outdoor run cages, plastic coated rod bottom, sanitized at least every 2 weeks



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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