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Data Sheet

H0610.ES9 Lot No. 2110214

Human Epidermal Skin S9 Fraction
Mixed Gender, Pool of 6
0.5 mL at 4 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)	1.10 ± 0.00
Testosterone 6β-hydroxylation	(pmol/mg protein/min)	8.22 ± 0.49
Glucuronidation of 4-Methylumbelliferone	(nmol/mg protein/min)	< 0.1
6α-Methylprednisolone 21-hemisuccinate hydrolysis	(pmol/mg protein/min)	525 ± 49

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, skin 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 $MgCl_2$ (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 testosterone (250 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, skin 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), $MgCl_2$ (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.

To measure carboxylesterase activity, skin S9 samples (0.15 mg/mL) were incubated in triplicate at 37 ± 2°C for 10 minutes in potassium phosphate buffer (50 mM, pH 7.4), containing $MgCl_2$ (3.0 mM), EDTA (1.0 mM), and 6α-methylprednisonlone 21-hemisuccinate (750 µM), at the final concentrations indicated. Metabolite formation was determined by LC-MS/MS methods with deuterated metabolites as internal standards.

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.

Datasheet prepared 11 August 2021

Donor Information

Sample	Gender	Age (Yrs)	Race	Cause of Death
30	F	46	Caucasian	Cerebrovascular accident
32	F	55	Caucasian	Anoxia
33	F	55	Caucasian	Anoxia
34	M	63	Caucasian	Anoxia
35	F	63	Caucasian	Anoxia
36	M	56	Caucasian	Anoxia

Serology information

- Donors were not tested for cytomegalovirus
- All donors tested negative for RPR*
- All donors tested negative for HIV, HbsAg, and HCV**

***** Rapid Plasma Reagin.

** Antibody to Human Immunodeficiency Virus, Hepatitis B Surface Antigen, Antibody to Hepatitis C Virus, respectively.

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