

Human Liver S9 Fraction – Pool of 50 Lot No. 2310054 H0610.S9

Human Liver S9 Fraction Mixed Gender, Pool of 50 Suspension medium: 50 mM Tris·HCI, 150 mM KCI, 2 mM EDTA

H0610.S90.5 mL at 20 mg/mLH0620.S91.0 mL at 20 mg/mLH0630.S95.0 mL at 20 mg/mLH0640.S950.0 mL at 20 mg/mL

Specific Content and Enzyme Activities		Content / Rate
Cytochrome P450 content	(nmol/mg protein)	0.136
Cytochrome b₅ content	(nmol/mg protein)	0.074
7-Ethoxycoumarin O-dealkylation	(pmol/mg protein/min)	183 ± 12
Glucuronidation of 4-methylumbelliferone	(nmol/mg protein/min)	31.4 ± 3.2
CDNB <sup>a</sup>	(nmol/mg protein/min)	471 ± 22

<sup>a</sup> 1-Chloro-2,4-dinitrobenzene-glutathione conjugation by glutathione S-transferase.

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, liver S9 samples (0.2 mg/mL) were incubated in triplicate at  $37 \pm 2^{\circ}$ 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 7-ethoxycoumarin (500  $\mu$ M), 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, liver S9 samples (0.1 mg/mL) were incubated in triplicate at  $37 \pm 2^{\circ}$ 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  $\mu$ M), 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 glutathione S-transferase activity (GST), liver S9 samples (5 to 50  $\mu$ g/mL) were incubated in triplicate at 37 ± 2°C for 10 minutes in potassium phosphate buffer (100 mM, pH 6.5), glutathione (1 mM), and CDNB (1 mM), at the final concentrations indicated. Reaction rates are determined by photometric kinetic measurements at 340 nm.



## 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: <u>Stephanie Helmstetter</u> <u>22 March 2023</u>

Data Sheel

## **Donor Information**

Sample	Gender	Age (Yrs)	Race	Cause of Death
342	F	31	Caucasian	Anoxia
387	М	60	Caucasian	Cerebrovascular Accident
403	F	51	Caucasian	Anoxia
409	F	63	Hispanic	Cerebrovascular Accident
415	М	56	Caucasian	Anoxia
424	F	39	Caucasian	Cerebrovascular Accident
447	F	54	Caucasian	Anoxia
460	F	43	Hispanic	Cerebrovascular Accident
467	М	33	Caucasian	Anoxia
468	М	47	Caucasian	Cerebrovascular Accident
471	М	49	Caucasian	Anoxia
476	F	46	Caucasian	Cerebrovascular Accident
477	F	65	Caucasian	Anoxia
486	F	49	Caucasian	Anoxia
488	М	57	Caucasian	Head Trauma
490	F	60	Caucasian	Cerebrovascular Accident
491	М	46	Caucasian	Cerebrovascular Accident
498	М	33	Caucasian	Head Trauma
501	F	58	Caucasian	Anoxia
503	F	64	Caucasian	Anoxia
516	М	49	Caucasian	Cerebrovascular Accident
517	F	47	Caucasian	Cerebrovascular Accident
519	М	48	African American	Cerebrovascular Accident
521	М	56	Caucasian	Anoxia
526	М	34	Caucasian	Head Trauma
528	М	60	Caucasian	Head Trauma
529	М	26	Caucasian	Head Trauma
530	F	64	Caucasian	Head Trauma
540	F	54	Caucasian	Head Trauma
546	F	53	Caucasian	Cerebrovascular Accident
550	F	68	Caucasian	Anoxia
553	М	74	African American	Cerebrovascular Accident
563	F	52	Caucasian	Cerebrovascular Accident
570	М	49	Caucasian	Cerebrovascular Accident
578	F	56	Hispanic	Cerebrovascular Accident
593	М	59	Caucasian	Head Trauma
723	F	57	Caucasian	Cerebrovascular Accident
816	М	55	Hispanic	Head Trauma
833	M	48	Hispanic	Anoxia
946	M	50	African American	Anoxia
951	M	62	Caucasian	Cerebrovascular Accident
962	M	47	Caucasian	Anoxia
976	F	61	Caucasian	Head Trauma
997	M	63	Caucasian	Anoxia
1005	M	45	Caucasian	Cerebrovascular Accident
1005	171	+J	Jaucasian	

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## **Donor Information**

Sample	Gender	Age (Yrs)	Race	Cause of Death
1020	F	24	Caucasian	Cerebrovascular Accident
1068	М	43	Caucasian	Head Trauma
1106	F	20	Caucasian	Cerebrovascular Accident
1124	М	22	Caucasian	Cerebrovascular Accident
1155	F	43	Caucasian	Cerebrovascular Accident

## Serology information

- Antibody to Cytomegalovirus: 27 of 50 donors tested positive, 1 donor not tested.
- RPR\*: All donors tested negative.
- HIV, HbsAg, and HCV\*\*: All donors tested negative.
- \* Rapid Plasma Reagin
- \*\* Antibody to Human Immunodeficiency Virus, Hepatitis B Surface Antigen, Antibody to Hepatitis C Virus, respectively.

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