

HHNML.S9 Lot No. 2010126

Human Liver S9 – Normal Donor Pool

Untreated, Mixed Gender, Pool of 27

1.0 mL at 20 mg protein / mL

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

Enzyme Activities

Enzyme	Marker Substrate Reaction	[S] (μM)	Rate (pmol/mg protein/min)
CYP1A2	Phenacetin O-dealkylation	80	103 ± 8
CYP2A6	Coumarin 7-hydroxylation	50	244 ± 5
CYP2B6	Bupropion hydroxylation	500	160 ± 12
CYP2C8	Amodiaquine N-dealkylation	20	538 ± 65
CYP2C9	Diclofenac 4'-hydroxylation	100	700 ± 32
CYP2C19	S-Mephenytoin 4'-hydroxylation	400	11.9 ± 0.8
CYP2D6	Dextromethorphan O-demethylation	80	48.9 ± 4.8
CYP2E1	Chlorzoxazone 6-hydroxylation	500	719 ± 26
CYP3A4/5	Testosterone 6β-hydroxylation	250	777 ± 38
CYP3A4/5	Midazolam 1'-hydroxylation	30	173 ± 5
CYP4A11	Lauric acid 12-hydroxylation	100	481 ± 7

Characterization is performed when the first lot of a product from a given subcellular fraction (e.g., S9) is prepared. Subsequent lots are subject to a verification test only. 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 (200 μg/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 marker substrate, at the final concentrations indicated. Metabolite formation was determined by validated 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.

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Datasheet prepared 30 October 2020

Donor Information

Sample	Gender	Age (Yrs)	Race	Cause of Death
403	F	51	Caucasian	Anoxia
418	F	62	Hispanic	Cerebrovascular Accident
510	M	41	African American	Anoxia
528	M	60	Caucasian	Head Trauma
529	M	26	Caucasian	Head Trauma
533	M	28	African American	Anoxia
553	M	74	African American	Cerebrovascular Accident
601	M	35	Caucasian	Anoxia
606	F	76	Caucasian	Cerebrovascular Accident
736	F	46	Caucasian	Anoxia
761	M	70	Caucasian	Cerebrovascular Accident
805	F	24	African American	Anoxia
817	F	31	Caucasian	Anoxia
848	M	50	Caucasian	Head Trauma
857	M	59	Caucasian	Anoxia
863	M	50	Caucasian	Anoxia
880	M	46	Caucasian	Cerebrovascular Accident
881	M	48	Caucasian	Anoxia
898	F	58	African American	Cerebrovascular Accident
946	M	50	African American	Anoxia
947	F	45	Caucasian	Cerebrovascular Accident
954	M	55	Caucasian	Anoxia
986	M	63	Caucasian	Anoxia
1005	M	45	Caucasian	Cerebrovascular Accident
1008	M	36	Hispanic	Cerebrovascular Accident
1307	M	50	Asian	Cerebrovascular Accident
1362	M	56	Caucasian	Cerebrovascular Accident

Serology information

- Antibody to Cytomegalovirus: 16 of 27 donors tested positive.
- RPR*: 27 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.