

HHNML Lot No. 1810085

Human Liver Microsomes – Normal Donor Pool

Untreated, Mixed Gender, Pool of 27

0.5 mL at 20 mg protein / mL

Suspension medium: 250 mM sucrose

Enzyme Activities

Enzyme	Marker Substrate Reaction	[S] (μM)	Rate (pmol/mg protein/min)
CYP1A2	Phenacetin O-dealkylation	80	429 ± 4
CYP2A6	Coumarin 7-hydroxylation	50	1140 ± 200
CYP2B6	Bupropion hydroxylation	500	789 ± 114
CYP2C8	Amodiaquine N-dealkylation	20	2210 ± 120
CYP2C9	Diclofenac 4'-hydroxylation	100	3270
CYP2C19	S-Mephenytoin 4'-hydroxylation	400	57.4 ± 4.1
CYP2D6	Dextromethorphan O-demethylation	80	289 ± 72
CYP2E1	Chlorzoxazone 6-hydroxylation	500	1900 ± 490
CYP3A4/5	Testosterone 6β-hydroxylation	250	2620 ± 140
CYP3A4/5	Midazolam 1'-hydroxylation	30	758 ± 53
CYP4A11	Lauric acid 12-hydroxylation	100	2310 ± 60

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 microsomes (50 μg/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 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.

These data were generated by and are the property of XenoTech. These data are not to be reproduced, published or distributed without the express written consent of XenoTech.

Datasheet prepared 07 May 2018

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.

These data were generated by and are the property of XenoTech. These data are not to be reproduced, published or distributed without the express written consent of XenoTech.