

## HHNSH.S9 Lot No. 1810234

Human Liver S9 – NASH Donor Pool

Untreated, Mixed Gender, Pool of 5

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	67.2 ± 7.5
CYP2A6	Coumarin 7-hydroxylation	50	115 ± 6
CYP2B6	Bupropion hydroxylation	500	40.5 ± 3.0
CYP2C8	Amodiaquine N-dealkylation	20	161 ± 7
CYP2C9	Diclofenac 4'-hydroxylation	100	344 ± 54
CYP2C19	S-Mephenytoin 4'-hydroxylation	400	< 0.1
CYP2D6	Dextromethorphan O-demethylation	80	34.0 ± 2.8
CYP2E1	Chlorzoxazone 6-hydroxylation	500	409 ± 9
CYP3A4/5	Testosterone 6β-hydroxylation	250	319
CYP3A4/5	Midazolam 1'-hydroxylation	30	92.3 ± 7.9
CYP4A11	Lauric acid 12-hydroxylation	100	183 ± 29

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 (50 μg/mL) were incubated in triplicate at 37 ± 2°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 marker substrate, at the final concentrations indicated. Metabolite formation was determined by validated LC-MS/MS methods with deuterated metabolites as internal standards.

### Donor Information

Sample	Gender	Age (Yrs)	Race	Cause of Death
958	M	47	Caucasian	Cerebrovascular accident
1027	F	63	Caucasian	Cerebrovascular accident
1028	F	51	African American	Cerebrovascular accident
1060	M	49	Hispanic	Cerebrovascular accident
1069	M	39	Caucasian	Cerebrovascular accident

#### Serology information

- Cytomegalovirus: 4 of 5 donors tested positive.
- 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.



**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 17 January 2019