

H1000.H15B Lot No. HC10-20

Cryopreserved Human Hepatocytes Human, Male, Individual

Assured Minimum Yield: 4.0 x 10⁶ cells per vial

Viability: 91%

Yield and viability are based on experiments performed at XenoTech using XenoTech's thawing protocol and OptiThaw Hepatocyte Kit.

Enzyme	Marker Substrate Reaction	[S] (µM)	Rate (pmol/million cells/min)
CYP1A2	Phenacetin O-dealkylation	100	6.06 ± 0.54
CYP2A6	Coumarin 7-hydroxylation	50	7.99 ± 0.95
CYP2B6	Bupropion hydroxylation	500	10.6 ± 1.9
CYP2C8	Amodiaquine N-dealkylation	20	33.6 ± 8.2
CYP2C9	Diclofenac 4'-hydroxylation	100	66.1 ± 2.7
CYP2C19	S-Mephenytoin 4'-hydroxylation	400	0.71 ± 0.09
CYP2D6	Dextromethorphan O-demethylation	80	16.2 ± 0.3
CYP2E1	Chlorzoxazone 6-hydroxylation	500	217 ± 16
CYP3A4/5	Testosterone 6β-hydroxylation	250	103 ± 15
CYP3A4/5	Midazolam 1'-hydroxylation	30	30.4 ± 3.3
UGT	7-Hydroxycoumarin glucuronidation	100	299 ± 22
SULT	7-Hydroxycoumarin sulfonation	100	46.9 ± 2.2

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), UDP-glucuronosyl transferase (UGT) and sulfotransferase (SULT) activities, hepatocytes (1 x 10^6 /mL) in suspension were incubated in triplicate at $37 \pm 1^{\circ}$ C for 30 minutes in Optilncubate 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

Gender: Male Age: 31 years of age Race: Hispanic Cause of Death: **Anoxia** Antibody to Cytomegalovirus (CMV): Negative **Human Immunodeficiency Virus (HIV):** Negative **Hepatitis B Surface Antigen (HbsAg):** Negative Antibody to Hepatitis C Virus (HCV): Negative



Store in liquid nitrogen, vapor phase

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 16 May 2016