

H1000.H15-B Lot No. HC5-17

Cryopreserved Human Hepatocytes
 Human, Male, Individual

Assured Minimum Yield: 4.0×10^6 cells per vial
 Average Yield 6.38×10^6 cells per vial
 Average Viability: 85.5%

Yield and viability are based on experiments performed at XenoTech using XenoTech's thawing protocol and K2000 Hepatocyte Isolation Kit.

Enzyme	Marker Substrate Reaction	[S] (μM)	Rate ($\mu\text{mol}/\text{million cells}/\text{min}$)
CYP1A2	Phenacetin O-dealkylation	100	16.9 ± 1.9
CYP2A6	Coumarin 7-hydroxylation	50	4.55 ± 0.49
CYP2B6	Bupropion hydroxylation	500	17.1 ± 1.3
CYP2C8	Amodiaquine N-dealkylation	20	33.4 ± 0.7
CYP2C9	Diclofenac 4'-hydroxylation	100	299 ± 9
CYP2C19	S-Mephenytoin 4'-hydroxylation	400	1.60 ± 0.19
CYP2D6	Dextromethorphan O-demethylation	80	13.1 ± 1.4
CYP2E1	Chlorzoxazone 6-hydroxylation	500	130 ± 6
CYP3A4/5	Testosterone 6β -hydroxylation	250	46.4 ± 2.8
CYP3A4/5	Midazolam 1'-hydroxylation	30	11.6 ± 1.1
UGT	7-Hydroxycoumarin glucuronidation	100	574 ± 79
SULT	7-Hydroxycoumarin sulfonation	100	21.9 ± 3.1

Values for enzyme activities were determined at a single substrate concentration and are mean \pm standard deviation of three or more determinations.

To measure cytochrome P450 (CYP), UDP-glucuronosyl transferase (UGT) and sulfotransferase (SULT) activities, hepatocytes (1×10^6 /mL) in suspension were incubated in triplicate at $37 \pm 1^\circ\text{C}$ for 30 minutes in Krebs-Henseleit buffer 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:	55 years
Race:	Caucasian
Cause of Death:	Anoxia
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.

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Datasheet prepared 23 December 2014