

H1000.H15-B Lot No. HC5-10A

Cryopreserved Human Hepatocytes
 Human, Male, Individual

Assured Minimum Yield: 4.0×10^6 cells per vial
 Average Yield 6.15×10^6 cells per vial
 Average Viability: 78.6%

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] (μ M)	Rate (pmol/million cells/min)
CYP1A2	Phenacetin O-dealkylation	100	13.4 ± 0.9
CYP2A6	Coumarin 7-hydroxylation	50	34.3
CYP2B6	Bupropion hydroxylation	500	32.5 ± 3.2
CYP2C8	Amodiaquine N-dealkylation	20	159 ± 7
CYP2C9	Diclofenac 4'-hydroxylation	100	193 ± 39
CYP2C19	S-Mephenytoin 4'-hydroxylation	400	1.93 ± 0.07
CYP2D6	Dextromethorphan O-demethylation	80	67.5 ± 3.9
CYP2E1	Chlorzoxazone 6-hydroxylation	500	266 ± 11
CYP3A4/5	Testosterone 6 β -hydroxylation	250	112 ± 6
CYP3A4/5	Midazolam 1'-hydroxylation	30	12.5 ± 0.7

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:	40 years
Race:	Caucasian
Cause of Death:	Cerebrovascular accident
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 24 December 2014