XENOTECH
A BioIVT Company

Data Sheet

H1000.H15B Lot No. HC5-9

Cryopreserved Human Hepatocytes
Human, Male, Individual

Assured Minimum Yield: 4.0 x 10^6 cells per vial
Viability: 78.4%

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 (pmol/million cells/min)*
CYP1A2	Phenacetin *O*-dealkylation	100	24.5 ± 1.9
CYP2A6	Coumarin 7-hydroxylation	50	40.1 ± 2.6
CYP2B6	Bupropion hydroxylation	500	48.7 ± 5.2
CYP2C8	Amodiaquine *N*-dealkylation	20	215 ± 56
CYP2C9	Diclofenac 4'-hydroxylation	100	342 ± 30
CYP2C19	*S*-Mephenytoin 4'-hydroxylation	400	2.17 ± 0.14
CYP2D6	Dextromethorphan *O*-demethylation	80	13.5 ± 1.2
CYP2E1	Chlorzoxazone 6-hydroxylation	500	122 ± 17
CYP3A4/5	Testosterone 6β-hydroxylation	250	118 ± 7
CYP3A4/5	Midazolam 1'-hydroxylation	30	64.6 ± 11.6
CYP4A/11	Lauric Acid 12-hydroxylation	100	63.7 ± 3.5
UGT	7-Hydroxycoumarin glucuronidation	100	493 ± 26
SULT	7-Hydroxycoumarin sulfonation	100	29.6 ± 3.3

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 ± 1°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:	30 years of age
Race:	Caucasian
Cause of Death:	Cerebrovascular accident
Cytomegalovirus (CMV):	Positive
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.

Datasheet prepared 24 February 2014