XENOTECH
A BioIVT Company

Data Sheet

H1000.H15B Lot No. HC3-42

Cryopreserved Human Hepatocytes
Human, Male, Individual

Assured Minimum Yield:	4.0 x 10^6 cells per vial
Viability:	85%

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	57.0 ± 6.4
CYP2A6	Coumarin 7-hydroxylation	50	41.9 ± 1.2
CYP2B6	Bupropion hydroxylation	500	48.8
CYP2C8	Amodiaquine *N*-dealkylation	20	509 ± 36
CYP2C9	Diclofenac 4'-hydroxylation	100	234 ± 49
CYP2C19	*S*-Mephenytoin 4'-hydroxylation	400	12.1 ± 2.2
CYP2D6	Dextromethorphan *O*-demethylation	80	65.3 ± 3.0
CYP2E1	Chlorzoxazone 6-hydroxylation	500	109 ± 16
CYP3A4/5	Testosterone 6β-hydroxylation	250	407 ± 63
CYP3A4/5	Midazolam 1'-hydroxylation	30	79.5 ± 7.3
UGT	7-Hydroxycoumarin glucuronidation	100	399 ± 25
SULT	7-Hydroxycoumarin sulfonation	100	33.8 ± 2.9

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 OptiIncubate 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:	52 years of age
Race:	Caucasian
Cause of Death:	Anoxia
Antibody to 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 14 April 2017