XENOTECH
A BioIVT Company

Data Sheet

H1000.H15C Lot No. HC7-31

Cryopreserved Human Hepatocytes
Human, Male, Individual

Assured Minimum Yield:	6.0 x 10^6 cells per vial
Viability:	77%

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	37.3 ± 2.1
CYP2A6	Coumarin 7-hydroxylation	50	20.1 ± 1.9
CYP2B6	Bupropion hydroxylation	500	13.2 ± 1.6
CYP2C8	Amodiaquine *N*-dealkylation	20	327 ± 30
CYP2C9	Diclofenac 4'-hydroxylation	100	281 ± 20
CYP2C19	*S*-Mephenytoin 4'-hydroxylation	400	29.7 ± 1.0
CYP2D6	Dextromethorphan *O*-demethylation	80	131 ± 1
CYP2E1	Chlorzoxazone 6-hydroxylation	500	57.5 ± 1.6
CYP3A4/5	Testosterone 6β-hydroxylation	250	273 ± 12
CYP3A4/5	Midazolam 1'-hydroxylation	30	14.5 ± 2.2
UGT	7-Hydroxycoumarin glucuronidation	100	482 ± 43
SULT	7-Hydroxycoumarin sulfonation	100	23.6 ± 1.5

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:	33 years of age
Race:	Caucasian
Cause of Death:	Cerebrovascular Accident
Antibody to Cytomegalovirus (CMV):	Negative

All donors tested negative for Human Immunodeficiency Virus (HIV), Hepatitis B Surface Antigen (HBsAg), Hepatitis C Virus, and Rapid Plasma Reagin.

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 09 April 2019