

H1500.H15C Lot No. HC2-26

Cryopreserved Human Hepatocytes Human, Female, Individual

Assured Minimum Yield:6.0 x 106 cells per vialAverage Viability:76.7%

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	95.7 ± 11.8
CYP2A6	Coumarin 7-hydroxylation	50	2.63 ± 0.23
CYP2B6	Bupropion hydroxylation	500	107 ± 11
CYP2C8	Amodiaguine N-dealkylation	20	142 ± 11
CYP2C9	Diclofenac 4'-hydroxylation	100	512 ± 49
CYP2C19	S-Mephenytoin 4'-hydroxylation	400	1.16 ± 0.23
CYP2D6	Dextromethorphan O-demethylation	80	21.7 ± 3.0
CYP2E1	Chlorzoxazone 6-hydroxylation	500	127 ± 20
CYP3A4/5	Testosterone 6β-hydroxylation	250	399 ± 28
CYP3A4/5	Midazolam 1'-hydroxylation	30	139 ± 6
UGT	7-Hydroxycoumarin glucuronidation	100	1390 ± 110
SULT	7-Hydroxycoumarin sulfonation	100	45.8 ± 3.3

Values for enzyme activities were determined at a single substrate concentration and are mean <u>+</u> 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 $37 \pm 1^{\circ}$ 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:	Female
Age:	20 years
Race:	Asian
Cause of Death:	Anoxia
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.

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Datasheet prepared 03 March 2014