

## H1000.H15B Lot No. HC5-9

Cryopreserved Human Hepatocytes  
 Human, Male, Individual

Assured Minimum Yield:  $4.0 \times 10^6$  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.

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

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 ( $1 \times 10^6$  /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

<b>Gender:</b>	Male
<b>Age:</b>	30 years of age
<b>Race:</b>	Caucasian
<b>Cause of Death:</b>	Cerebrovascular accident
<b>Cytomegalovirus (CMV):</b>	Positive
<b>Human Immunodeficiency Virus (HIV):</b>	Negative
<b>Hepatitis B Surface Antigen (HbsAg):</b>	Negative
<b>Antibody to Hepatitis C Virus (HCV):</b>	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 February 2014