

H1500.H15B+ Lot No. HC2-34

Cryopreserved Human Hepatocytes
 Human, Female, Individual

Assured Minimum Yield: 4.0×10^6 cells per vial
 Viability: 93.2%

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	12.2 \pm 0.8
CYP2A6	Coumarin 7-hydroxylation	50	5.91 \pm 0.84
CYP2B6	Bupropion hydroxylation	500	19.6 \pm 3.2
CYP2C8	Amodiaquine N-dealkylation	20	81.3 \pm 10.0
CYP2C9	Diclofenac 4'-hydroxylation	100	202 \pm 22
CYP2C19	S-Mephenytoin 4'-hydroxylation	400	13.7 \pm 2.3
CYP2D6	Dextromethorphan O-demethylation	80	54.8 \pm 9.5
CYP2E1	Chlorzoxazone 6-hydroxylation	500	354 \pm 23
CYP3A4/5	Testosterone 6 β -hydroxylation	250	11.5 \pm 1.1
CYP3A4/5	Midazolam 1'-hydroxylation	30	5.78 \pm 0.52
UGT	7-Hydroxycoumarin glucuronidation	100	524 \pm 20
SULT	7-Hydroxycoumarin sulfonation	100	11.2

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 (1×10^6 /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

Gender:	Female
Age:	9 years of age
Race:	Caucasian
Cause of Death:	Anoxia
Cytomegalovirus (CMV):	Negative
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.

These data were generated by and are the property of XenoTech. These data are not to be reproduced, published or distributed without the express written consent of XenoTech.

Datasheet prepared 08 December 2014

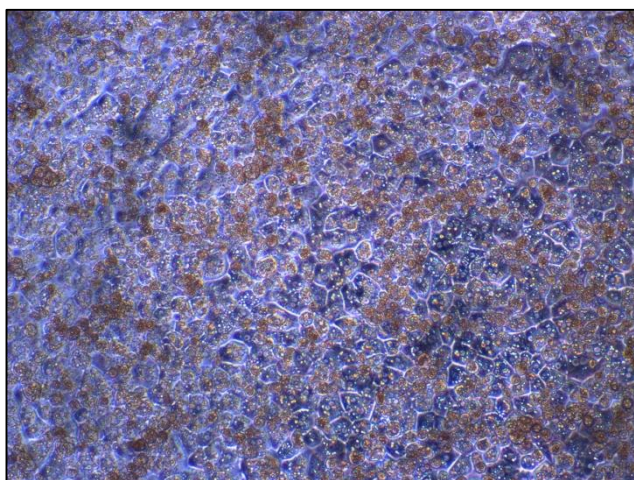
H1500.H15B+ Lot No. HC2-34

Cryopreserved Human Hepatocytes
Human, Female, Individual

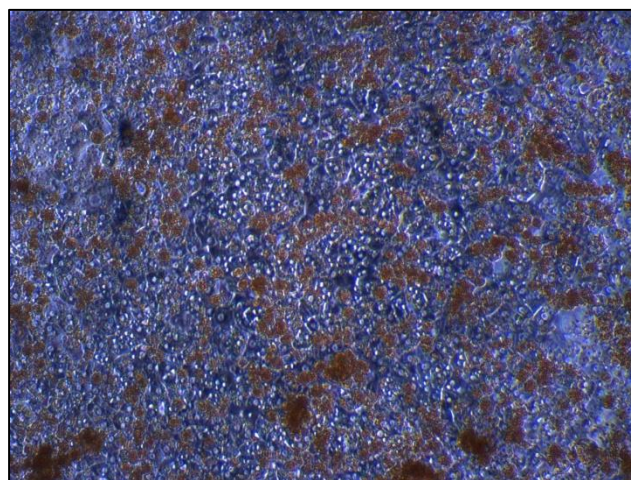
Assured Minimum Yield: 4.0×10^6 cells per vial
Viability: 93.2%

Yield and viability are based on experiments performed at XenoTech using XenoTech's thawing protocol and K2000 Hepatocyte Isolation Kit.

Recommended Seeding Density: 1.0 million cells/mL



Photomicrograph (100x) of HC2-34 Day 1 of culture



Photomicrograph (100x) of HC2-34 incubation day

Induction Data

Enzyme	Inducer	mRNA Fold Induction	Marker Substrate Reaction	Enzymatic Fold Induction
CYP1A2	Omeprazole (100 μ M)	143	Phenacetin O-dealkylation	94.9
CYP2B6	Phenobarbital (750 μ M)	23.4	Bupropion hydroxylation	22.8
CYP2B6	CITCO (100 nM)	8.8	Bupropion hydroxylation	6.28
CYP3A4	Rifampin (10 μ M)	469	Midazolam 1'-hydroxylation	79.2



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.

These data were generated by and are the property of XenoTech. These data are not to be reproduced, published or distributed without the express written consent of XenoTech.

Datasheet prepared 08 December 2014