

H1500.H15B+ Lot No. HC2-19

Cryopreserved Human Hepatocytes
 Human, Female, Individual

Assured Minimum Yield: 4.0×10^6 cells per vial
 Viability: 85.5%

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	22.0 \pm 3.7
CYP2A6	Coumarin 7-hydroxylation	50	10.2 \pm 1.1
CYP2B6	Bupropion hydroxylation	500	14.1 \pm 1.9
CYP2C8	Amodiaquine N-dealkylation	20	225 \pm 34
CYP2C9	Diclofenac 4'-hydroxylation	100	467 \pm 58
CYP2C19	S-Mephenytoin 4'-hydroxylation	400	19.6 \pm 3.7
CYP2D6	Dextromethorphan O-demethylation	80	41.0 \pm 2.6
CYP2E1	Chlorzoxazone 6-hydroxylation	500	145 \pm 11
CYP3A4/5	Testosterone 6 β -hydroxylation	250	263 \pm 103
CYP3A4/5	Midazolam 1'-hydroxylation	30	34.8 \pm 4.8
UGT	7-Hydroxycoumarin glucuronidation	100	481 \pm 56
SULT	7-Hydroxycoumarin sulfonation	100	46.1 \pm 10.3

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 (1×10^6 /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:	Asian
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.

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Datasheet prepared 04 Decemeber 2013

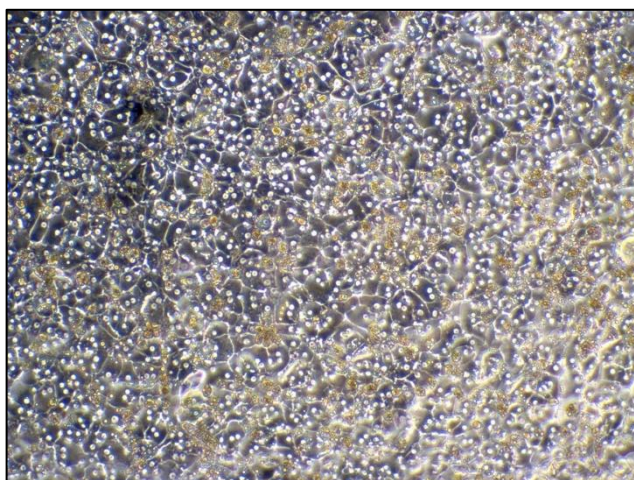
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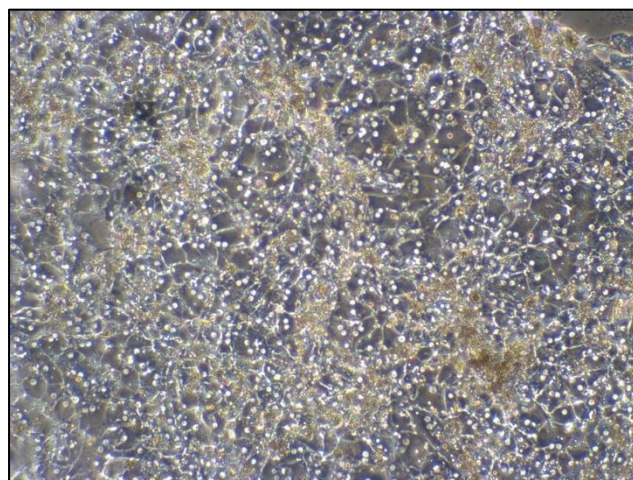
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Recommended Seeding Density: 1.2 million cells/mL



Photomicrograph (100x) of HC2-19 Day 2 of culture



Photomicrograph (100x) of HC2-19 incubation day

Induction Data

Enzyme	Inducer	mRNA Fold Induction	Marker Substrate Reaction	Enzymatic Fold Induction
CYP1A2	Omeprazole (100 μ M)	140	Phenacetin O-dealkylation	34.7
CYP2B6	Phenobarbital (750 μ M)	22.9	Bupropion hydroxylation	21.7
CYP3A4	Rifampin (10 μ M)	9.86	Testosterone 6 β -hydroxylation	2.39



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