

CryostaX

Single Freeze Cryopreserved Human Hepatocytes

HP1000.HP Lot No. H1424

Human, Male, Individual

Assured Minimum Yield: Viability:

5.0 x 10⁶ cells per vial 91%

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	130 ± 7
CYP2A6	Coumarin 7-hydroxylation	50	105 ± 16
CYP2B6	Bupropion hydroxylation	500	21.4 ± 0.5
CYP2C8	Amodiaquine <i>N</i> -dealkylation	20	258 ± 4
CYP2C9	Diclofenac 4'-hydroxylation	100	193 ± 4
CYP2C19	S-Mephenytoin 4'-hydroxylation	400	50.2 ± 3.3
CYP2D6	Dextromethorphan O-demethylation	80	23.8 ± 1.1
CYP2E1	Chlorzoxazone 6-hydroxylation	500	42.8
CYP3A4/5	Testosterone 6β-hydroxylation	250	221 ± 23
CYP3A4/5	Midazolam 1'-hydroxylation	30	31.5 ± 0.7
UGT	7-Hydroxycoumarin glucuronidation	100	289 ± 34
SULT	7-Hydroxycoumarin sulfonation	100	25.3 ± 1.2

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 10⁶ /mL) in suspension were incubated in triplicate at 37 ± 2°C for 30 minutes in Optilncubate 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:	36 years of age	
Race:	Caucasian	
Cause of Death:	Head Trauma	
Antibody to Cytomegalovirus (CMV):	Positive	
All donors tested negative for Human Immunodeficiency Virus (HIV), Hepatitis B Surface Antigen (HBsAg), Hepatitis C Virus, and		
Rapid Plasma Reagin.		



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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