

CryostaX

Single Freeze Cryopreserved Human Hepatocytes

HP1000.HP Lot No. H1426

Human, Male, Individual

Assured Minimum Yield: 5.0×10^6 cells per vial
 Viability: 89%

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

Enzyme	Marker Substrate Reaction	[S] (μ M)	Rate (pmol/million cells/min)
CYP1A2	Phenacetin O-dealkylation	100	21.6 ± 2.3
CYP2A6	Coumarin 7-hydroxylation	50	115 ± 13
CYP2B6	Bupropion hydroxylation	500	162 ± 2
CYP2C8	Amodiaquine N-dealkylation	20	522 ± 27
CYP2C9	Diclofenac 4'-hydroxylation	100	312 ± 8
CYP2C19	S-Mephenytoin 4'-hydroxylation	400	2.06 ± 0.13
CYP2D6	Dextromethorphan O-demethylation	80	58.6 ± 3.5
CYP2E1	Chlorzoxazone 6-hydroxylation	500	59.9 ± 6.2
CYP3A4/5	Testosterone 6 β -hydroxylation	250	274 ± 12
CYP3A4/5	Midazolam 1'-hydroxylation	30	38.9 ± 1.3
UGT	7-Hydroxycoumarin glucuronidation	100	484 ± 97
SULT	7-Hydroxycoumarin sulfonation	100	34.5 ± 4.1

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 $37 \pm 2^\circ\text{C}$ for 30 minutes in OptiIncubate 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:	57 years of age
Race:	Caucasian
Cause of Death:	Anoxia
Antibody to Cytomegalovirus (CMV):	Negative
All donors tested negative for Human Immunodeficiency Virus (HIV), Hepatitis B Surface Antigen (HBsAg), Hepatitis C Virus, and Rapid Plasma Reagin.	



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 14 January 2021