

CryostaX

HPCH20-50 Lot No. 1210253

Single Freeze Pooled Cryopreserved Human Hepatocytes
 Pool of 20 (10 Males and 10 Females)

Assured Minimum Yield: 5.0×10^6 cells per vial
 Viability: 80.0%

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] (μ M)	Rate (pmol/million cells/min)
CYP1A2	Phenacetin O-dealkylation	100	53.7 ± 5.5
CYP2A6	Coumarin 7-hydroxylation	50	35.7 ± 6.0
CYP2B6	Bupropion hydroxylation	500	55.6 ± 10.5
CYP2C8	Amodiaquine N-dealkylation	20	276 ± 46
CYP2C9	Diclofenac 4'-hydroxylation	100	239 ± 24
CYP2C19	S-Mephenytoin 4'-hydroxylation	400	6.97 ± 1.22
CYP2D6	Dextromethorphan O-demethylation	80	26.7 ± 0.3
CYP2E1	Chlorzoxazone 6-hydroxylation	500	175
CYP3A4/5	Testosterone 6 β -hydroxylation	250	242 ± 81
CYP3A4/5	Midazolam 1'-hydroxylation	30	70.4 ± 7.4
UGT	7-Hydroxycoumarin glucuronidation	100	599 ± 50
SULT	7-Hydroxycoumarin sulfonation	100	37.3 ± 2.6

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:	Males (10), Females (10)
Age:	9-77 years of age
Race:	Caucasian (17), African American (2), Asian (1)
Cause of Death:	Anoxia (5), Head trauma (2), Cerebrovascular accident (13)
Cytomegalovirus (CMV):	Positive (11), Negative (9)
Human Immunodeficiency Virus (HIV):	Negative (20)
Hepatitis B Surface Antigen (HbsAg):	Negative (20)
Antibody to Hepatitis C Virus (HCV):	Negative (20)



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 02 July 2012