

CryostaX Geneknown™

Single Freeze Pooled Cryopreserved Human Hepatocytes

HPCH.2C19.NA Lot No. 1510236

Pool of 3

Assured Minimum Yield: 4.5×10^6 cells per vial
 Viability: >70.0%

Individual Donor Genotype Information:

Donor	CYP1A1	CYP1A2	CYP2A6	CYP2B6	CYP2D6	CYP2C8	CYP2C9	CYP2C19	CYP2E1	CYP3A4	CYP3A5
960	*1/*2	*1C/*1F	*9/*9	*1/*16	*1/*36x2+*10	*1/*1	*1/*1	*2/*2	*1/*1	*1/*1	*3/*7
1205	*1/*1	*1/*1	*1/*1	*1/*1	*1/*4	*1/*1	*1/*1	*2/*2	*1/*1	*1/*1	*3/*3
1209	*1/*4	*1/*1	*1/*1	*1/*6	*1/*1	*1/*4	*1/*1	*2/*2	*1/*1	*1/*1	*3/*3

Enzyme	Marker Substrate Reaction	[S] (μM)	Rate (pmol/million cells/min)
CYP1A2	Phenacetin O-dealkylation	100	57.1
CYP2A6	Coumarin 7-hydroxylation	50	14.2
CYP2B6	Bupropion hydroxylation	500	27.1
CYP2C8	Amodiaquine N-dealkylation	20	126
CYP2C9	Diclofenac 4'-hydroxylation	100	258
CYP2C19	S-Mephenytoin 4'-hydroxylation	400	0.57
CYP2D6	Dextromethorphan O-demethylation	80	37.3
CYP2E1	Chlorzoxazone 6-hydroxylation	500	90.6
CYP3A4/5	Testosterone 6β-hydroxylation	250	73.9
CYP3A4/5	Midazolam 1'-hydroxylation	30	13.7

Values for enzyme activities are averages of the individual donor activities for each specified CYP, therefore the values indicated should be considered theoretical.

To measure cytochrome P450 (CYP) activities, hepatocytes (1×10^6 cells/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:	Male (3)
Age:	57-60 years of age
Race:	Caucasian (2), African American (1)
Cause of Death:	Cerebrovascular accident (3)
Cytomegalovirus (CMV):	Positive (2), Negative (1)
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 23 January 2019