

CryostaX Geneknown™

Single Freeze Pooled Cryopreserved Human Hepatocytes

HPCH.3A5.NA Lot No. 1510230

Pool of 3

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

Individual Donor Genotype Information:

Donor	CYP1A1	CYP1A2	CYP2A6	CYP2B6	CYP2D6	CYP2C8	CYP2C9	CYP2C19	CYP2E1	CYP3A4	CYP3A5
1196	*1/*1	*1F/*1K	*1/*1	*1/*6	*1/*4	*1/*1	*1/*1	*17/*17	*1/*1	*1/*22	*3/*3
1207	*1/*1	*1C/*1C	*1/*1	*1/*6	*2/*2	*1/*1	*1/*1	*1/*1	*1/*1	*1/*1	*3/*3
1211	*1/*1	*1F/*1F	*1/*1	*1/*1	*2x2/*4	*1/*1	*1/*2	*1/*1	*1/*1	*1/*1	*3/*3

EnzymeMarker Substrate ReactionCYP1A2Phenacetin O-dealkylation		[S] (µM)	Rate (pmol/million cells/min)	
		100	37.2	
CYP2A6	Coumarin 7-hydroxylation	50	13.4	
CYP2B6	Bupropion hydroxylation	500	36.6	
CYP2C8	Amodiaquine N-dealkylation	20	97.4	
CYP2C9	Diclofenac 4'-hydroxylation	100	196	
CYP2C19	S-Mephenytoin 4'-hydroxylation	400	15.3	
CYP2D6	Dextromethorphan O-demethylation	80	40.8	
CYP2E1			293	
CYP3A4/5	Testosterone 6β-hydroxylation	250	136	
CYP3A4/5	Midazolam 1'-hydroxylation	30	23.6	

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 x 10^6 cells/mL) in suspension were incubated in triplicate at $37 \pm 1^\circ$ 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 (1), Female (2)		
Age: 9-56 years of age			
Race: Caucasian (2), Asian (1)			
Cause of Death:	Cerebrovascular accident (1), Anoxia (2)		
Cytomegalovirus (CMV):	Positive (1), Negative (2)		
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