

# CryostaX

Single Freeze Cryopreserved Human Hepatocytes

**HP1000.HP Lot No. H1449**

Human, Male, Individual

Assured Minimum Yield:  $5.0 \times 10^6$  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] ( $\mu$ M)	Rate (pmol/million cells/min)
CYP1A2	Phenacetin O-dealkylation	100	$11.9 \pm 2.1$
CYP2A6	Coumarin 7-hydroxylation	50	$86.8 \pm 10.4$
CYP2B6	Bupropion hydroxylation	500	$85.8 \pm 17.8$
CYP2C8	Amodiaquine N-dealkylation	20	$522 \pm 28$
CYP2C9	Diclofenac 4'-hydroxylation	100	$300 \pm 18$
CYP2C19	S-Mephenytoin 4'-hydroxylation	400	$5.52 \pm 0.56$
CYP2D6	Dextromethorphan O-demethylation	80	$87.6 \pm 4.2$
CYP2E1	Chlorzoxazone 6-hydroxylation	500	$82.1 \pm 13.7$
CYP3A4/5	Testosterone 6 $\beta$ -hydroxylation	250	$93.6 \pm 35.9$
CYP3A4/5	Midazolam 1'-hydroxylation	30	$11.2 \pm 1.4$
UGT	7-Hydroxycoumarin glucuronidation	100	$533 \pm 25$
SULT	7-Hydroxycoumarin sulfonation	100	$15.1 \pm 0.7$

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 ( $1 \times 10^6$  /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

<b>Gender:</b>	Male
<b>Age:</b>	61 years of age
<b>Race:</b>	Caucasian
<b>Cause of Death:</b>	Head Trauma
<b>Antibody to Cytomegalovirus (CMV):</b>	Positive
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