

H1500.H15B Lot No. HC4-24

Cryopreserved Human Hepatocytes
 Human, Female, Individual

Assured Minimum Yield: 4.0×10^6 cells per vial
 Viability: 75%

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 | 14.5 ± 1.5 |
| CYP2A6 | Coumarin 7-hydroxylation | 50 | 17.9 ± 3.5 |
| CYP2B6 | Bupropion hydroxylation | 500 | 14.7 ± 0.6 |
| CYP2C8 | Amodiaquine N-dealkylation | 20 | 123 ± 23 |
| CYP2C9 | Diclofenac 4'-hydroxylation | 100 | 155 ± 20 |
| CYP2C19 | S-Mephenytoin 4'-hydroxylation | 400 | 23.7 ± 4.1 |
| CYP2D6 | Dextromethorphan O-demethylation | 80 | 52.3 ± 8.0 |
| CYP2E1 | Chlorzoxazone 6-hydroxylation | 500 | 20.8 ± 3.0 |
| CYP3A4/5 | Testosterone 6 β -hydroxylation | 250 | 186 ± 39 |
| CYP3A4/5 | Midazolam 1'-hydroxylation | 30 | 71.3 |
| UGT | 7-Hydroxycoumarin glucuronidation | 100 | 380 ± 41 |
| SULT | 7-Hydroxycoumarin sulfonation | 100 | 12.5 ± 0.2 |

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 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: | Female |
| Age: | 22 years of age |
| Race: | Caucasian |
| Cause of Death: | Cerebrovascular accident |
| 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 24 January 2019