

# HTG DMPK Assay Datasheet

# **HTG Edge**

HTG Molecular Diagnostics has designed a HTG DMPK Assay that is deployable on the fully automated, award-winner HTG Edge System. Until recently, DMPK testing was performed utilizing labor intensive and complex PCR methodologies.

HTG DMPK Assay has been designed to run exclusively on HTG Edge System with minimal manual intervention. The assay is mRNA pre-configured to profile 47 genes associated with drug metabolism and pharmacokinetics. It has been optimized to measure RNA expression from primary hepatocytes and incorporates the cytochrome p450 genes as recommended in the 2012 draft FDA guidance document.

#### **Features**

- Automated assay on HTG Edge System
- Select only the relevant genes
- Test multiple lots of primary hepatocytes with the same assay
- Test Phase 1 and Phase 2 metabolism genes
- Includes 16 potential drug transporters
- · Highly flexible test options

#### Fully automated on HTG Edge System



#### **HTG Edge DMPK Gene List**

Phase 1	Phase 2	Transporter	Reductase	Housekeepers
OCYP1A1	<ul><li>CYP3A5</li></ul>	<ul><li>ABCB11</li></ul>	<ul><li>GSR</li></ul>	<ul><li>ACTB</li></ul>
CYP1A2*	<ul><li>SULT1A1</li></ul>	<ul><li>ABCC2 (MRP2/CMOAT)</li></ul>		• EEF2
CYP2A6	<ul><li>UGT1A1</li></ul>	<ul><li>ABCC3 (MRP3/MLP2)</li></ul>	Oxidase	GAPDH
CYP2B6	<ul><li>UGT1A3</li></ul>	<ul><li>ABCC4 (MRP4/MOATB)</li></ul>	CYP1A2	RPLPO
CYP2C19	<ul><li>UGT1A4</li></ul>	<ul><li>ABCG2 (BCRP/ABCP</li></ul>		
CYP2C8	<ul><li>UGT1A6</li></ul>	<ul> <li>ALC15A2 (PEPT2)</li> </ul>		Controls
CYP2C9	<ul><li>UGT1A9</li></ul>	<ul><li>CABCB1 (MDR1/PGP)</li></ul>		ANT
CYP2D6	<ul><li>UGT2B17</li></ul>	<ul> <li>SLC15A1 (PEPT1)</li> </ul>		POS1
CYP2E1	<ul><li>UGT2B7</li></ul>	<ul><li>SLC22A1 (OCT1)</li></ul>		
• CYP3A4*		<ul><li>SLC22A2 (OCT2)</li></ul>		
		<ul><li>SLC22A6 (OAT1)</li></ul>	• • • • •	
		<ul><li>SLC22A8 (OAT3)</li></ul>		0000000000
		<ul> <li>SLC47A1 (MATE1)</li> </ul>		00000000000
		<ul> <li>SLCO1B1 (OATP1B1)</li> </ul>		00000000000
		<ul> <li>SLCO1B3 (OATP1B3)</li> </ul>		00000000000
		<ul><li>SLCO2B1 (OAT2B1)</li></ul>		000000000000



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#### **Sample Input Requirements**

 Sample Type
 Minimum Sample Requirements

 Cells, primary hepatocytes
 12,000 cells

Assay kit for mRNA measurement of DMPK genes in hepatocyte cell lines. Kit contains all reagents, consumables and is automated on the HTG Edge System.

### Ordering Information

HTG Edge DMPK Assay Kit

816-095-040 4-pack (full-plate) Assay Kit



## **HTG Edge System**

The award-winning HTG Edge System is the only automated RNA expression platform that delivers extraction-free, multiplexed results on a multitude of biological samples (tissue, blood, serum, cells) with fast turn-around times. The fully automated system is capable of performing HTG Edge Assays utilizing minimal specimen with walk-away simplicity, eliminating the tedious extraction and amplification steps normally associated with RT-PCR.

## Simple

Fully automated. No extraction.

#### **Accurate**

High fidelity between fresh and fixed tissue.

### Benefits of HTG Edge System and Chemistry

- No RNA extraction EVER
- Broad variety of biological sample types, including FFPE, frozen tissue, cells, xenografts, PAXgene and plasma
- Barcoded reagents for ease of traceability and reporting
- ISO 13485:2003 hardware/software development

#### Request a Quote

Call 877-289-2615 today for more information on HTG Edge System.



Part Number: 816-095-040 Rev 4: 8-AUG-2014

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