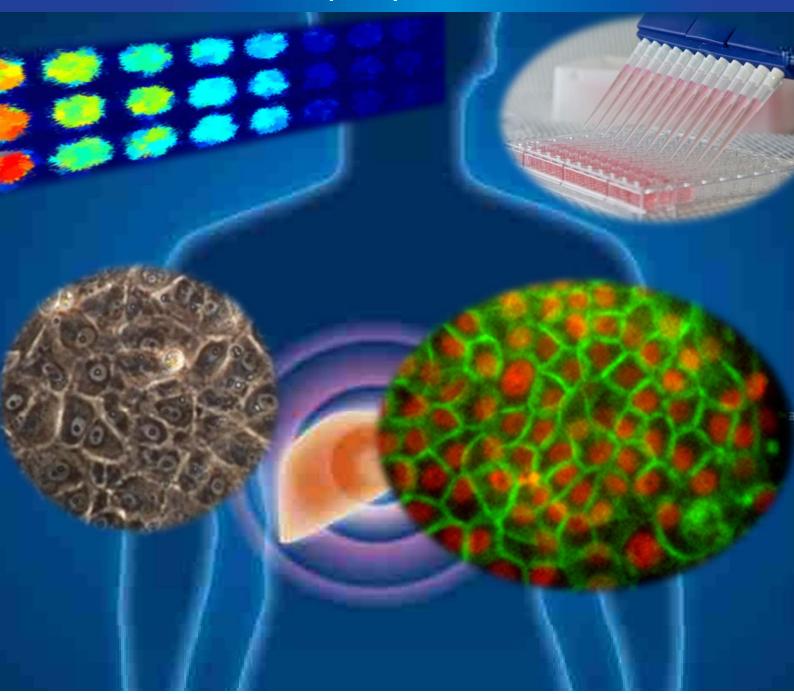
## ReproHepato Type 1™



**Human iPS Cell-Derived Hepatocytes** 



- Robust CYP activity
- Expression of transporters (NTCP and OATP1B1, etc.)
- Longer retention of CYP activity
- Hepatotoxic response similar to primary hepatocytes
- CYP induction assay and hepatotoxicity assay services available



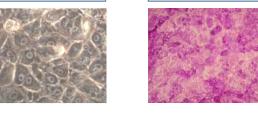


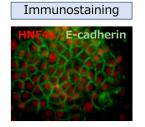
#### Kit contents:

- · Frozen cells (8.25 million cells/vial)
- · Thawing Medium
- · Maintenance medium & supplement
- · Assay Medium & supplement
- · Coating solution

#### **Z** Basic characteristics of ReproHepato<sup>™</sup>

# Bright-field

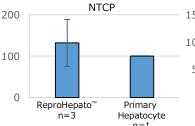




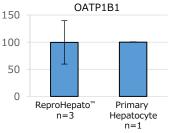
Gene expression (qPCR)

Average ± SD

(% : Primary hepatocyte is normalized to 100)

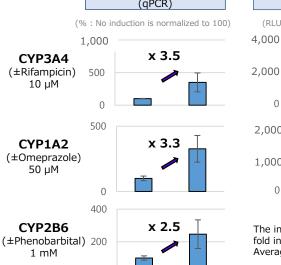


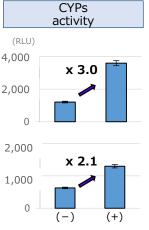
PAS staining



#### Induction capability of CYPs

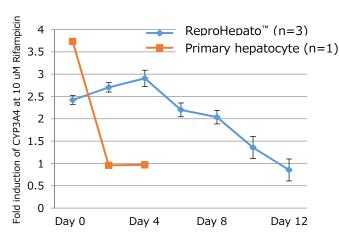
### Gene expression (qPCR)





The inserted number indicates a fold induction of each CYP. Average  $\pm$  SD, n=3

#### Longer retention of CYP activity



Induction activity of ReproHepato™ is maintained longer (ca. Day 8) than primary hepatocyte.

Rifampicin added two days before each day. Average ± SD

#### Hepatotoxicity (CellTiter-Glo® Luminescent Cell Viability Assay : Promega)

IC50 (μM)	Acetaminophen	Amiodarone	Cyclophosphamide	Diclofenac	Flutamide
ReproHepato <sup>™</sup>	2,525	0.5	3,030	50.5	5.1
Human hepatocytes*	6,500	<b>1</b> 0	8,140	300	75
Human hepatic cell line A*	7,500	40	No Data	No Data	50
Human hepatic cell line B*	29,755	79	22,027	399	231
Rat hepatocytes*	14,014	38	3,657	263	10

The response to the compounds of hepatotoxicity is similar to primary hepatocytes. : Data is cited from several papers.

Visit ReproCELL's web site for

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- Additional information on ReproHepato™
- Handling and assay procedure
- Detailed information about kit contents and additional reagents

ReproHepato

On receiving the kit, immediately transfer the frozen cells to liquid nitrogen and use the cells as soon as possible. These cells are very sensitive to changes in temperature. For optimal viability, follow the instruction strictly.

For Research Use Only



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