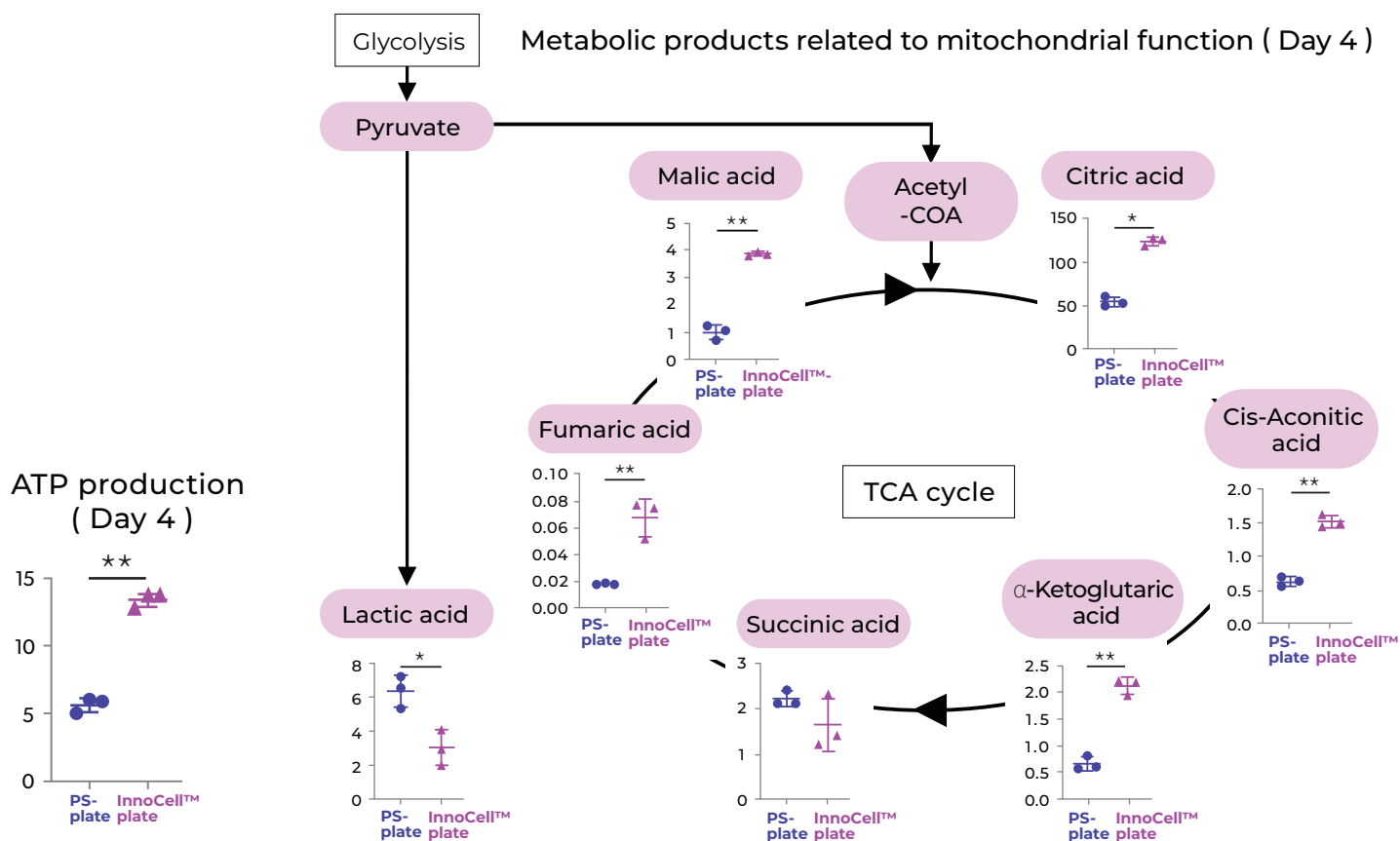
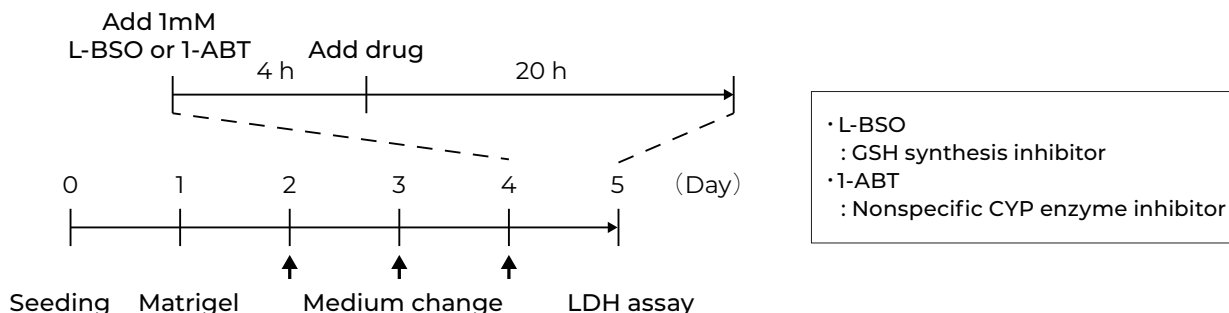


Drug Discovery Research 1

Example assay using primary rat hepatocytes (1/2)

• Reference : New in vitro screening system to detect drug-induced liver injury using a culture plate with low drug sorption and high oxygen permeability. *Drug Metabolism and Pharmacokinetics*, 52: 100511, (2023).

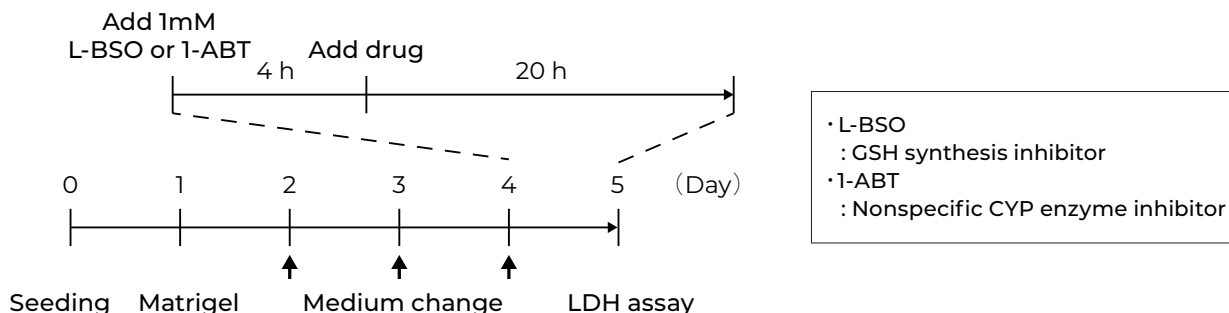


InnoCell™ plate has been shown to shift energy production of rat hepatocytes from the glycolytic system to the TCA cycle.

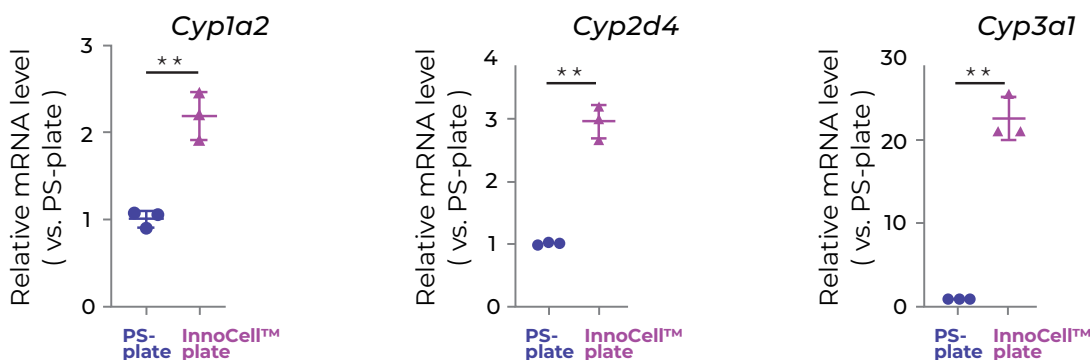
Drug Discovery Research 2

Example assay using primary rat hepatocytes (2/2)

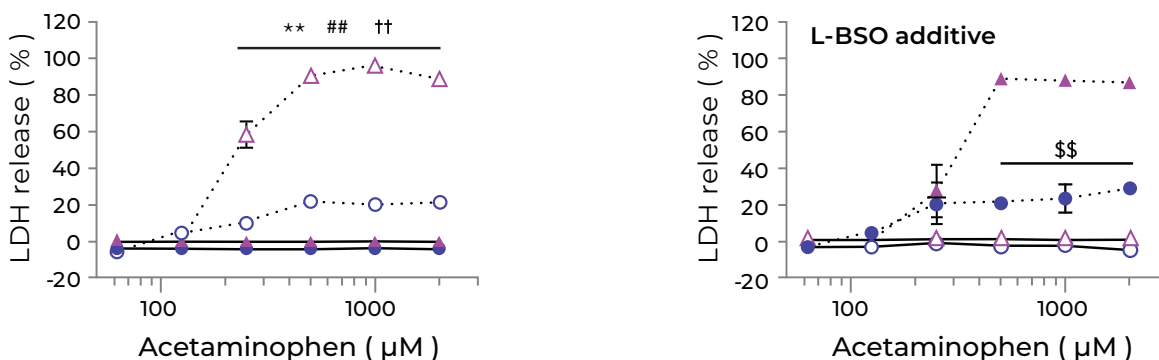
• Reference : New in vitro screening system to detect drug-induced liver injury using a culture plate with low drug sorption and high oxygen permeability. *Drug Metabolism and Pharmacokinetics*, 52: 100511, (2023).



CYP gene expression (Day 4)



Hepatocellular damage (Acetaminophen)



L-BSO not added : ● PS-plate | ▲ InnoCell™ plate
L-BSO Added : ○ PS-plate | △ InnoCell™ plate

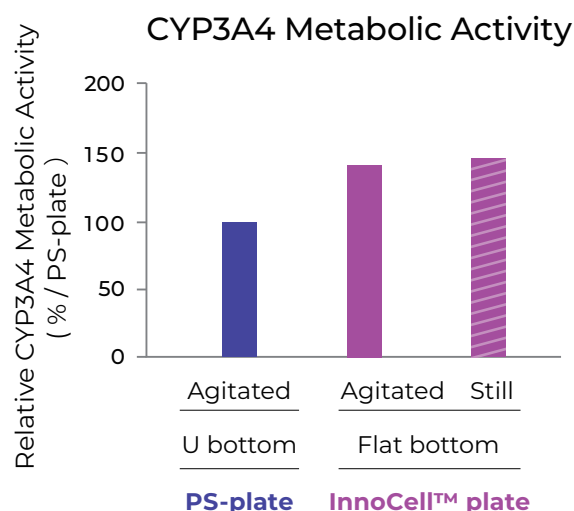
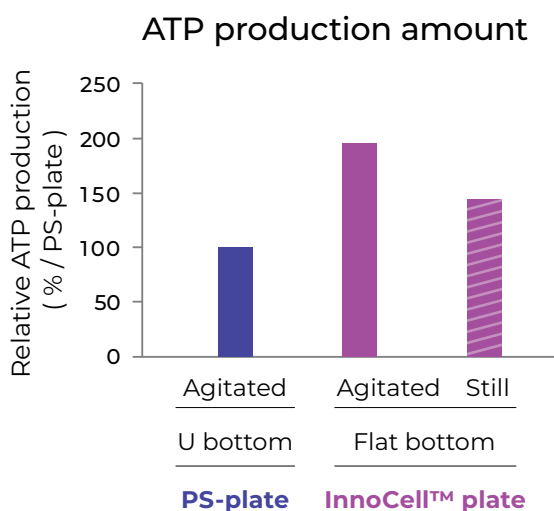
1-ABT not added : ● PS-plate | ▲ InnoCell™ plate
1-ABT Added : ○ PS-plate | △ InnoCell™ plate

Using InnoCell™ plate, hepatocellular cytotoxicity due to acetaminophen was increased in the presence of L-BSO and attenuated by adding 1-ABT. Hepatocellular cytotoxicity caused by reactive metabolites may be detected with high sensitivity.

Drug Discovery Research 3

Example assay using human 3D liver buds

• Data provided by Cyfuse Biomedical K.K.



Conditions

[Cell] Same company Human 3D liver buds
 [Culture period] 6 days
 [Plate type] InnoCell™ plate FP series (flat bottom)
 Non-treated (N type)

InnoCell™ plate maintains higher ATP production and CYP3A4 metabolism in human 3D liver buds.