

Name of the Journal: *World Journal of Stem Cells*

Manuscript NO: 55067

Manuscript type: ORIGINAL ARTICLE

Basic study

Creating rat hepatocyte organoid as an *in vitro* model for drug testing

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Abstract

BACKGROUND

Liver organoids have recently been applied to models of liver disease and drug

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In **vitro** models of the liver have led to important insights into the pathogenesis of liver disease. These models are essential tools in the discovery and preclinical stages of **drug** development. The clinical application of these models is also emerging as a promising avenue for validating genetic target-matched treatments, in a precision medicine approach to treatment.

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Publish Year: 2016

[World Hepatitis Day: 28 July 2020 - Frame](#)

<https://frame.org.uk/2020/07/28/world-hepatitis-day-2020> ▾

Jul 28, 2020 - The FAL set out to produce a physiologically relevant human liver **organoid** to be used in disease modelling and **drug testing**, using hepatic progenitor cells (HPC), which are found in the human liver and have the ability to divide and turn into mature liver cells known as **hepatocytes**. An **organoid** is formed when cells grown in the lab replicate ...

[Reconstruction of hepatic organoid by rat small ...](#)

<https://aasldpubs.onlinelibrary.wiley.com/doi/full/10.1002/hep.510290103>

Dec 30, 2003 - Hepatic cells isolated from an adult **rat** liver, consisting of small **hepatocytes** (SHs), mature **hepatocytes** (MHs), liver epithelial cells (LECs), Kupffer cells, sinusoidal endothelial cells, and stellate cells, were cultured in a medium supplemented with 10% fetal bovine serum, 10 mmol/L nicotinamide, 1 mmol/L ascorbic acid 2-phosphate, 10 ng/mL epidermal growth factor, and 1% ...

Cited by: 298 **Author:** Toshihiro Mitaka, Fumihiko Sato, Toru Miz...

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