

# Ready-to-use Human iPSC-Derived Intestinal Organoids

#### Ready-to-use Human iPSC-Derived Intestinal Organoids

Cat. No.: CIPO-IWL003K

### Description

Human iPSC-Derived Intestinal Organoids are differentiated from hESC or iPSCs using Human iPSC-Derived Intestinal Organoid Differentiation Kit (Cat. No. RIPO-IWM005K). Intestinal organoids are three-dimensional *in vitro* models with a cellular composition and structural organization that is representative to the human intestine regions. Organoids generated using Human iPSC-Derived Intestinal Organoid Differentiation Kit (Cat. No. RIPO-IWM005K) feature various types of cells, including intestinal epithelial cells, mesenchymal cells, enterocytes, Paneth cells, goblet cells, etc. These intestinal organoids show intestine crypt like structure, villi and microvilli like structure, as well as normal intestinal function validated by the absorption of fatty acid and glucose.

## **Product Specification**

The live organoids are ready-to-use organoids that are delivered in shipping medium and must go through a 48h recovery process according to instruction.

Origin	Human iPSC (ATCC-HYR0103)
Property	Suspension
Incubation	$37~^{\circ}\text{C}$ with $5\%~\text{CO}_2$
Biosafety Level	2

#### **Product Information**

Name	Shipment	Storage
Live intestinal organoids	4 ~ 25 °C	Please recover the live organoid immediately upon receipt.
Intestinal organoid recovery medium	4 ~ 25 °C	Please use immediately upon receipt.



## Materials Required for Organoid Culture

- Ultra-Low Adherent 6-well Plate
- Human iPSC-Derived Intestinal Organoid Maintenance Kit (Cat. No. RIPO-IWM006)

## **Equipment Required**

- Incubator (37°C, 5% CO<sub>2</sub>)
- Orbital Shaker (any brand, 2 cm shaking diameter)
- Biosafety Cabinet

#### Recovery

- a. Add 5 ml intestinal organoid recovery medium to each well of ultra-low adherent 6-well plate.
- b. Transfer the live intestinal organoid in the ultra-low adherent 6-well plate with 24 organoids per well. Please try to avoid transferring the shipping medium along with the organoid into the well.
- c. Put the plate on orbital shaker (as shown in the figure) with the speed of 100 rpm. Incubate at 37 °C, 5% CO<sub>2</sub> for 48 h.



#### **Culture**

- a. After 48 h of recovery, change the recovery medium in each well to 5 ml Intestinal Organoid Maintenance Medium (Cat. No. RIPO-IWM006) per well.
- b. Keep the plate on orbital shaker (as shown in the figure) with the speed of 100 rpm. Incubate at 37 °C, 5% CO<sub>2</sub>.
- c. Change the whole medium every 3 days.



## **Related Products**

Product	Cat. No.
Human iPSC-Derived Intestinal Organoid	RIPO-IWM006
Maintenance Kit	