

Ready-to-use Human iPSC-Derived Intestinal Organoids

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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 °C with 5% CO ₂ |
| Biosafety Level | 1 |

Product Information

| Name | Shipment | Storage |
|--|-----------|--|
| Live intestinal organoids | 4 ~ 25 °C | Please recover the live organoid immediately upon receipt. |
| Intestinal organoid maintenance 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% CO₂)
- Orbital Shaker (any brand, 2 cm shaking diameter)
- Biosafety Cabinet

Recovery

- Add 5 ml intestinal organoid maintenance medium to each well of ultra-low adherent 6-well plate.
- Transfer the live intestinal organoid in the ultra-low adherent 6-well plate with 10-20 organoids per well (depending on the organoid size). Please try to avoid transferring the shipping medium along with the organoid into the well.
- Put the plate on orbital shaker (as shown in the figure) with the speed of 100 rpm. Incubate at 37 °C, 5% CO₂ for 48 h.



Culture

- After 48 h of recovery, change the maintenance medium in each well to 5 ml Intestinal Organoid Maintenance Medium (Cat. No. RIPO-IWM006) per well.
- Keep the plate on orbital shaker (as shown in the figure) with the speed of 100 rpm. Incubate at 37 °C, 5% CO₂.
- Change the whole medium every 3 days.

Related Products

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