

## Product Information

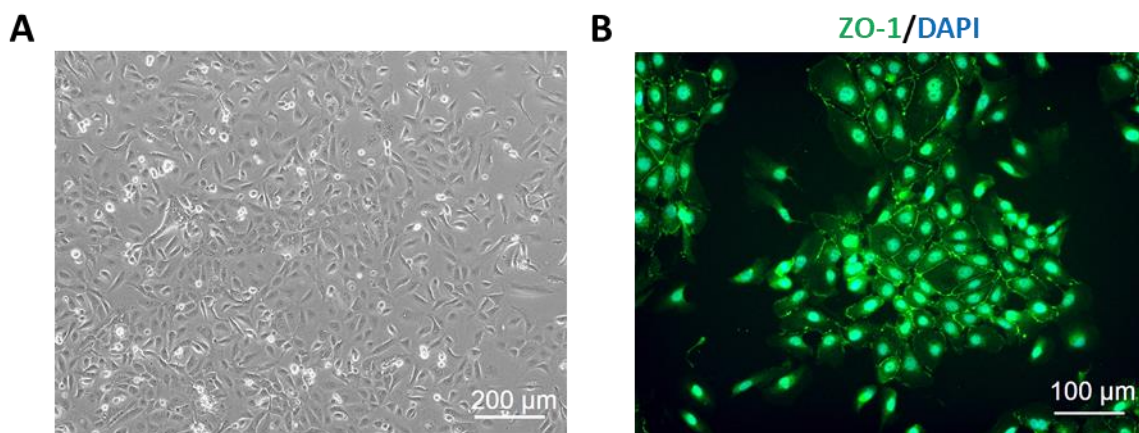
### Human Small Intestine Epithelial Cells (HSIEpC)

Catalog Number	10HU-237	Cell Number	0.5 million cells/vial
Species	<i>Homo sapiens</i>	Storage Temperature	Liquid Nitrogen

### Description

Human Small Intestine Epithelial Cells (HSIEpC) exist as a layer of cells that line the luminal surface of intestinal epithelium, where they play important roles in the digestion of food, absorption of nutrients, and protection of the human body from microbial infections, etc. <sup>[1]</sup> They are continuously replaced every 4-5 days through a process of renewal and migration. <sup>[2]</sup>

iXCells Biotechnologies provides high quality Human Small Intestine Epithelial Cells (HSIEpC), which are isolated from normal human small intestine tissue and cryopreserved at P2, with >0.5 million cells in each vial. They are negative for HIV-1, HBV, HCV, mycoplasma, bacteria, yeast, and fungi and can further expand in Epithelial Cell Growth Medium (Cat# MD-0041) under the condition suggested by iXCells Biotechnologies.



**Figure 1.** Human Small Intestine Epithelial Cells (HSIEpC).

(A) Phase contrast image of HSIEpC. (B) Immunofluorescence staining with antibody against ZO-1.

## Product Details

<b>Tissue</b>	Human small intestine tissue
<b>Package Size</b>	0.5 million cells/vial
<b>Passage Number</b>	P2
<b>Shipped</b>	Cryopreserved
<b>Storage</b>	Liquid nitrogen
<b>Growth Properties</b>	Adherent
<b>Media</b>	Epithelial Cell Growth Medium (Cat# MD-0041)

## Protocols

### Thawing of Frozen Cells

1. Upon receipt of the frozen cells, it is recommended to thaw the cells and initiate the culture immediately in order to retain the highest cell viability.
2. To thaw the cells, put the vial in 37°C water bath with gentle agitation for 1-2 minutes. Keep the cap out of water to minimize the risk of contamination.
3. Pipette the cells into a 15 mL conical tube with 5 mL fresh **Epithelial Cell Growth Medium (Cat# MD-0041)**.
4. Centrifuge at 1,000 rpm (~220 g) for 5 minutes under room temperature.
5. Remove the supernatant and resuspend the cells in fresh Epithelial Cell Growth Medium.
6. Culture the cell in the T75 flask. Change the medium every other day until cells reach 80-90% confluence.

**Safety Precaution:** *it is highly recommended that protective gloves and clothing should be used when handling frozen vials.*

### Standard Culture Procedure

1. Human Small Intestine Epithelial Cells (HSIEpC) can be cultured in **Epithelial Cell Growth Medium (Cat# MD-0041)**.
2. When cells reach ~80-90% confluence, remove the medium, and wash once with sterile PBS (5mL for one T75 flask).
3. Add 3 mL of 0.25% Trypsin-EDTA to the flask and incubate for 5 minutes at 37°C. Neutralize the enzyme by adding 2-3 volumes of cell culture medium.
4. Centrifuge 1,000 rpm (~220 g) for 5 minutes and resuspend the cells in desired volume of medium.
5. Seed the cells in the new culture vessels at  $5 \times 10^3$  cells/cm<sup>2</sup>. Change the medium every other day until cells reach 80-90% confluence.

## Disclaimers

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