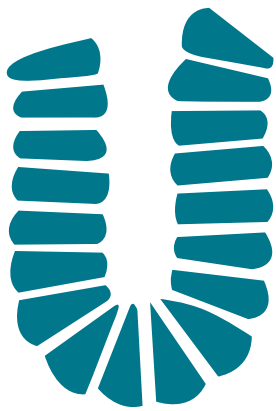


# ADULT STEM CELL-DERIVED INTESTINAL ORGANOIDS

Adult stem cell-derived intestinal organoid systems provide a range of physiologically relevant models for studying the human intestine. Each model recapitulates aspects of the intestinal epithelium, and careful consideration of their characteristics is needed to choose the best model for your research.

## Characteristics of **Adult Stem Cell-Derived** Intestinal Organoids



### STARTING MATERIAL

- Biopsies
- Isolated crypts
- Intestinal stem cells
- Passaged organoids

### EXPANDING ORGANOIDS

- Closed, 3D organoids
- Support the stem cell population

Passage

Dissociate



### ORGANOID MONOLAYER

- Open, 2D organoids
- Contains physiological proportions of stem and differentiated cell types
- Amenable for studies of barrier functions, co-cultures, and infectious diseases

Differentiate

Air Lift



### ORGANOID MONOLAYER (AIR-LIQUID INTERFACE)

- Open, 2D organoids
- Further enriched for goblet cells, enteroendocrine cells, and enterocytes
- Further differentiated intestinal brush border
- Amenable for studies of barrier functions, co-cultures, and infectious diseases

### DIFFERENTIATED ORGANOIDS

- Closed, 3D organoids
- Contain physiological proportions of stem and differentiated cell types

Explore optimized growth media and differentiation kits for organoids:

[www.stemcell.com/organoid-products](http://www.stemcell.com/organoid-products)

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