

# RepliGut<sup>®</sup> Planar Kits

RECREATING THE HUMAN INTESTINAL EPITHELIUM

## APPLICATIONS

Explore effects of drugs on proliferative and differentiated cells in a single system.

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Model inflammation for discovery of anti-inflammatory targets.

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Study functional differences between small and large intestinal cells.

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## Features

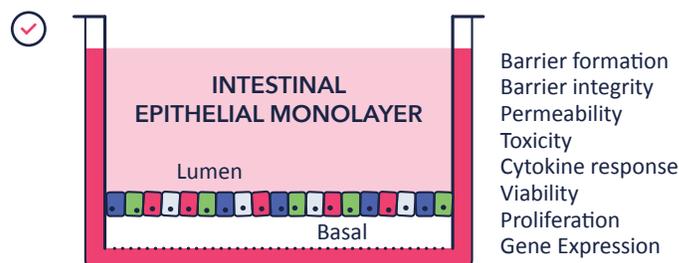
- Available in 96-well or 12-well format for compatibility with high throughput and high content applications.
- Available from multiple regions capable of differentiating into all key cell types in the gut epithelium.
- Have a fully functional, ready to use, confluent monolayer of intestinal epithelium within 7 days.

RepliGut<sup>®</sup> Systems recreate the human intestinal epithelium, enabling researchers to characterize new intestinal targets, test new leads, and predict toxicity risk earlier. Use of our RepliGut<sup>®</sup> Systems leads to better prediction of efficacy, safety, and ultimately success in clinical trials.

RepliGut<sup>®</sup> Systems derive from human primary stem cells capable of differentiating into key cell-types in the gut epithelium, forming a confluent epithelial monolayer with tight junctions for barrier integrity and permeability studies. Our ethically sourced diverse biobank of stem cells consists of multiple defined intestinal regions, allowing researchers to ask a variety of functional questions.

## Kit Components

- 1 **Multiwell Plate** 
- 2 **Region-Specific Stem Cells** 
- 3 **Transwells with Hydrogel Coating** 
- 4 **Expansion and Differentiation Media** 



## DIVERSE BIOBANK

An ethically sourced biobank consisting of multiple intestinal regions from multiple donors allows for both cross-region and cross-donor studies.

## UNPARALLED SUPPORT

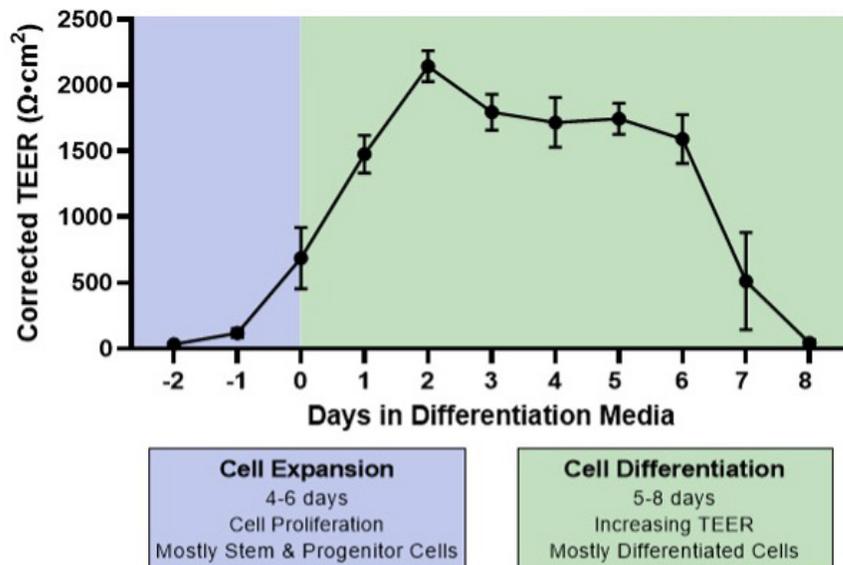
 Kit purchase includes 1-hour scientific consulting

 Detailed user manual

 **COMING SOON**  
Video Protocol

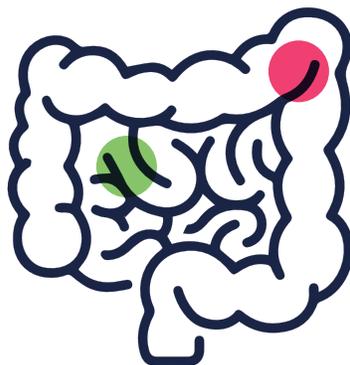
## Barrier Kinetics

Representative TEER kinetics during expansion and differentiation phases. Cells undergo proliferation for 4-6 days until confluent, then cells are changed into differentiation media (day 0). TEER increases during differentiation and reaches a plateau before normal turnover occurs.



## Multiple Regions Available

RepliGut<sup>®</sup> Planar kits can include stem cells from any one of 5 distinct intestinal regions.



### Small Intestine

- Duodenum
- Jejunum

### Colon

- Ascending Colon
- Transverse Colon
- Descending Colon



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A QUOTE

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