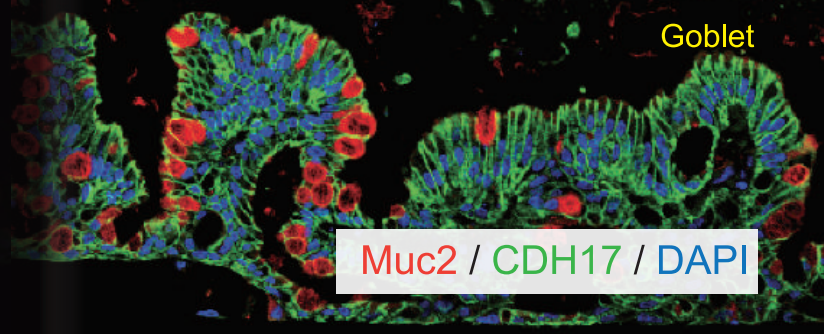


## MimEX™ GI

TISSUE MODEL SYSTEMS



- Disease 모델 구현 • 약물독성, 흡수 및 신진대사 연구 • Biomarker Discovery
- 크론병, 과민성 장 증후군, Microbiome, Gastrointestinal cancer, Metastasis 연구

### 01 Benefits of MimEX™ GI

<p><b>Organoid Tissue</b></p> <ul style="list-style-type: none"> <li>• Biopsy 결과와 유사한 morphology</li> <li>• Tight junction 재현</li> </ul>	<p><b>Tissue Consistency</b></p> <ul style="list-style-type: none"> <li>• 일정한 tissue Size</li> <li>• 일정한 tissue shape</li> <li>• 높은 재현성</li> </ul>	<p><b>Clonal Expansion and Gene Editing</b></p> <ul style="list-style-type: none"> <li>• Disease 모델 구현</li> <li>• Drug screening 가능</li> <li>• Toxicology test 가능</li> <li>• Biomarker 발굴</li> </ul>	<p><b>Preservation of Diseased Tissue</b></p> <ul style="list-style-type: none"> <li>• Gene editing 연구 가능 ex) CRISPR-Cas9</li> </ul>
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### 02 Overview

#### Isolate Adult GI Stem Cells

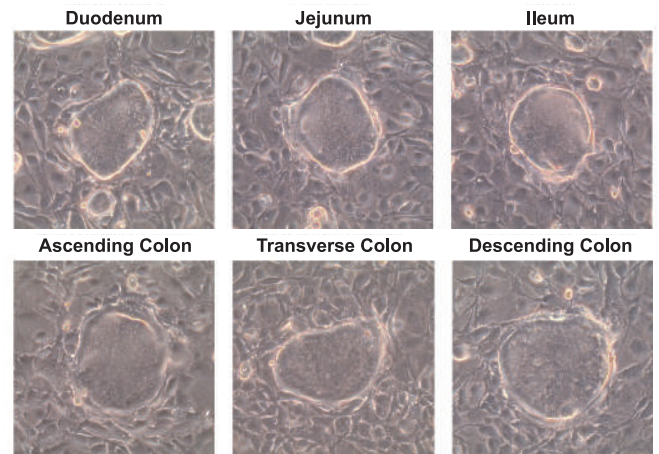
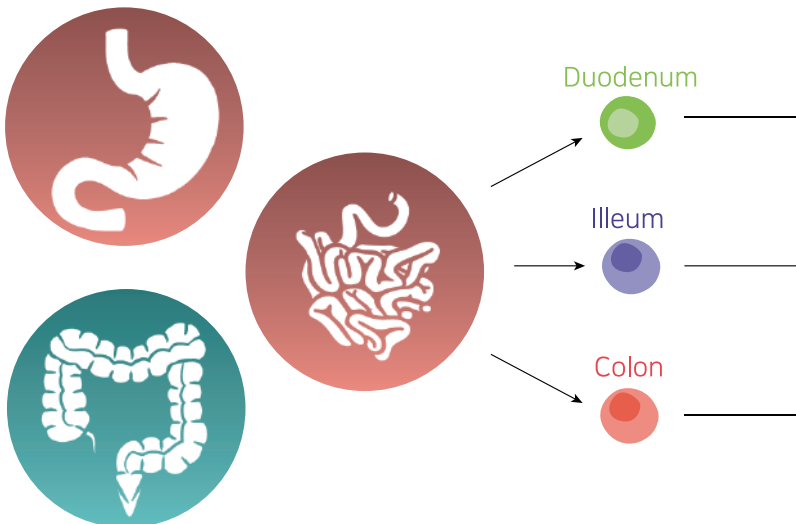
using the MimEX™ Tissue Processing Kit OR start directly with MimEX™ GI Stem Cells.

#### Expand Adult GI Stem Cells

in a 2-D culture using MimEX™ GI Expansion Media.

#### Differentiate Adult GI Stem Cells into 3-D Gastrointestinal Tissue

using MimEX™ GI Differentiation Media and an air-liquid culture system.

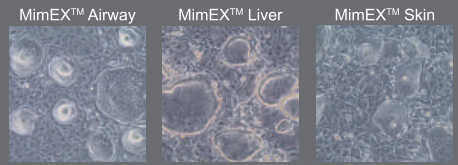




# MimEX™ GI

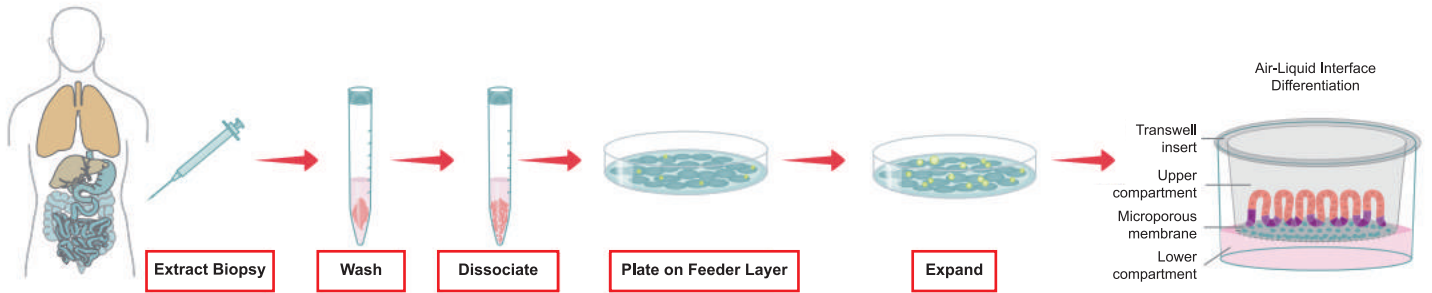
Available Now!

coming soon 모델



<Lung>

## 03 Workfolw and Time-course



### Isolate GI Stem Cells

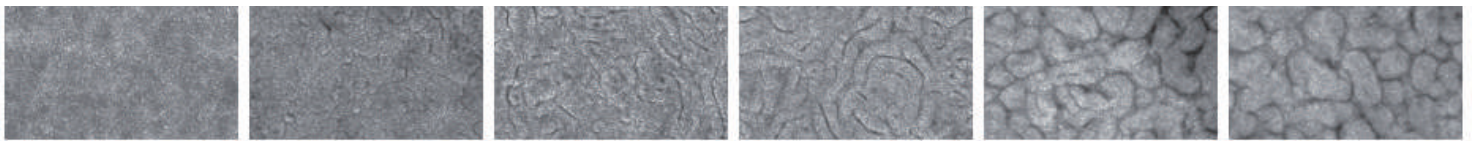
- MimEX Tissue Collection Kit (Catalog # MIM001)
- MimEX GI Stem Cells (Catalog # MIM006)

### Expand GI Stem Cells in 2-D Culture

- MimEX GI Expansion Media (Catalog # MIM003)
- MimEX GI Irradiated Fibroblasts (Catalog # MIM005)

### Differentiate into 3-D GI Tissue

- MimEX GI Differentiation Media (Catalog # MIM004)
- MimEX GI Irradiated Fibroblasts (Catalog # MIM005)
- Transwell Insert Culture Plate



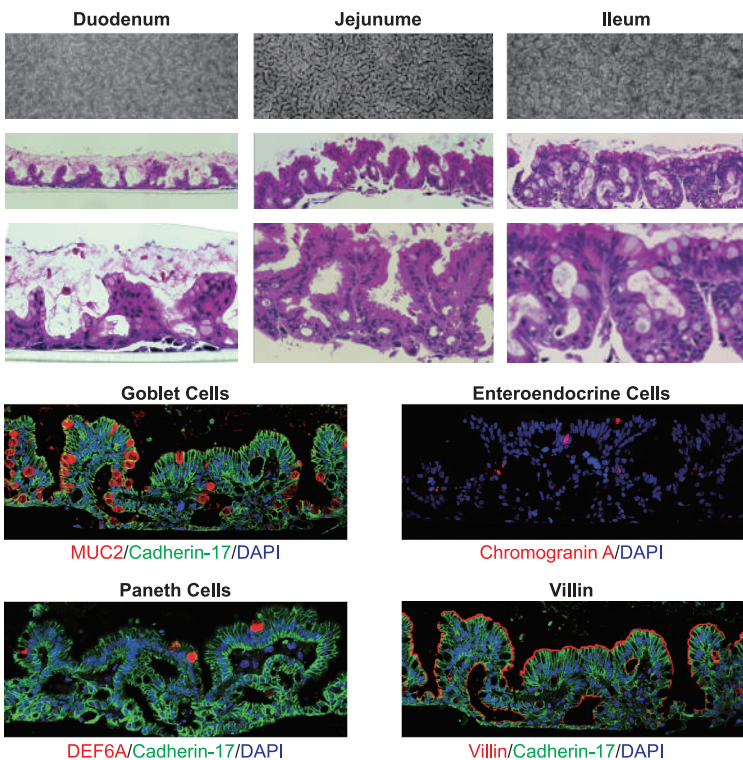
Plating of adult gastrointestinal stem cells in transwell insert

Development of tissue invaginations

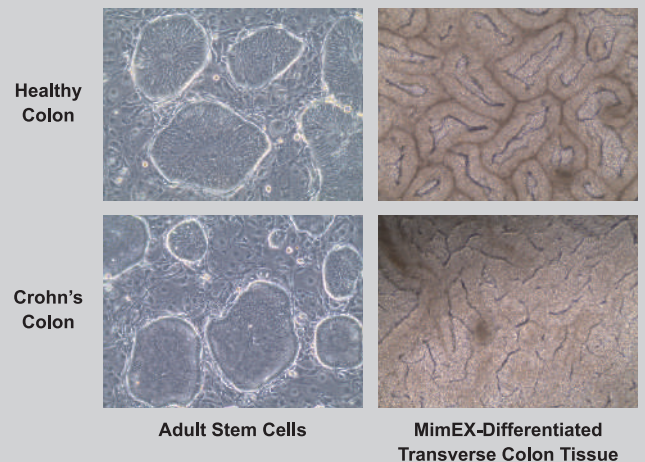
Mature ex vivo 3-D descending colon tissue

Stem cells differentiate into mature tissue in 9-12 days

## 04 Case Studies - Regional Specificity and Characterize



### Disease 모델 구현



R&D SYSTEMS  
a biotechne brand