

# Kickstarting your advanced 3D tissue cultures

- OrganoPlate®
- OrganoPlate® Graft
- OrganoPlate® Caco-2
- OrganoFlow®
- OrganoTEER®

**MIMETAS**

# OrganoPlate®

384-well  
plate format:  
**Compatible with  
your lab equipment  
and materials**

The OrganoPlate® is a 3D cell culture platform supporting a range of cell types and tissue configurations. It allows you to work with co-cultures, optimized microenvironments, and perfused tubular tissues without interference of artificial membranes.

The OrganoPlate® comes in 3 versions: 2-lane, 3-lane, and the open-well Graft.

## OrganoPlate®

### A plethora of tissue culture configurations

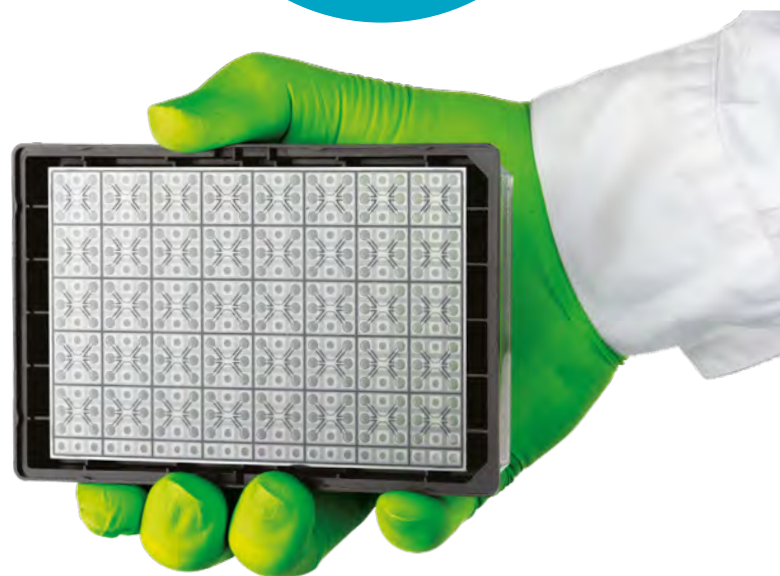
In-ECM cultures, against ECM cultures, tubular cultures or a combination. It's up to you.

### Supporting a wide range of cell types

From neurons, hepatocytes, epithelial, endothelial cells to organoids, PDX, and spheroids.

### Multiple readouts

Immunostaining, OrganoTEER®, barrier integrity, transport, viability assays, to name a few. All with tested protocols in your microscope, confocal or plate reader.



### No artificial membranes

Unique PhaseGuide™ technology allows cells to interact and migrate freely between channels.

### Apical and basal access

Enabling perfusion of tubules, interstitial flow, and addition of compounds and stimuli.



# OrganoPlate®

## OrganoPlate® 2-lane

### Tissue culture configurations

In-ECM cultures, against-ECM cultures, tubular cultures or a combination.

### Apical access

Enabling perfusion of tubules and addition of compounds and stimuli.



### OrganoPlate® 2-lane

- 96 tissue culture chips
- 2 adjacent channels per chip

[read more](#)

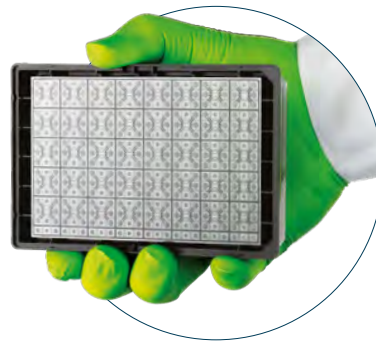
## OrganoPlate® 3-lane

### Tissue culture configurations

Combining multiple tubules, in-ECM cultures, and against-ECM cultures.

### Apical and basal access

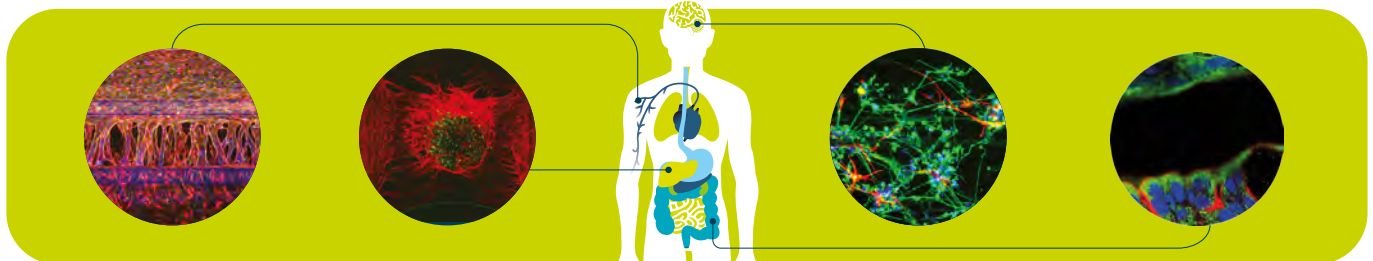
Enabling perfusion of tubular tissues and allowing barrier integrity-, transport-, and migration assays. Addition of compounds and stimuli from apical and basolateral sides.



### OrganoPlate® 3-lane

- 40 tissue culture chips
- 3 adjacent channels per chip

[read more](#)



*The OrganoPlate® supports a range of (co-) culture setups to create complex tissue- and organ models*

# OrganoPlate®

## OrganoPlate® Graft

The OrganoPlate® Graft is the first *in vitro* cell culture platform that allows you to vascularize 3D tissues like spheroids, organoids, and tumors.

### Vascularized 3D tissues

Add perfusable human vasculature to your tissue models, and recreate sophisticated microenvironments.

### Supporting a range of tissue sources

Multiple cell types and tissue sources possible: organoids, tissue explants, spheroids, PDX material and more.



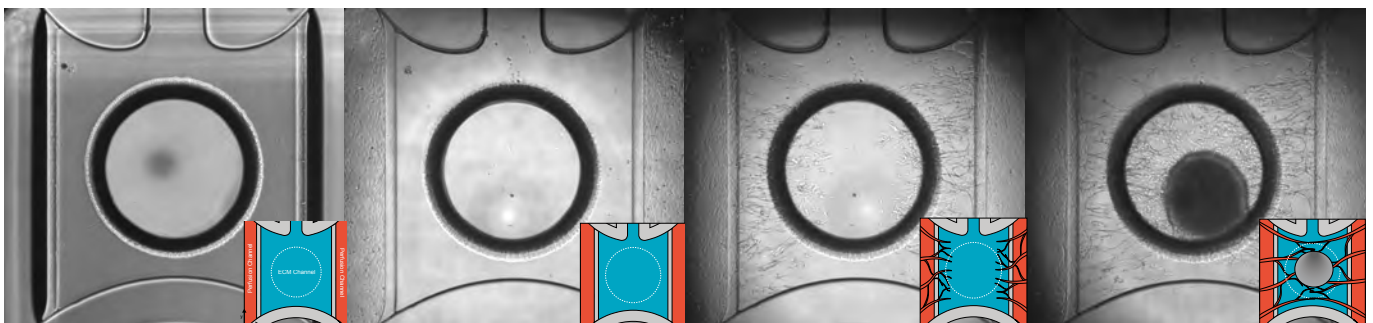
### OrganoPlate® Graft

- 64 tissue culture chips
- 3 adjacent channels, with one open chamber per chip

[read more](#)

### Apical and basal access to vessels

Enabling perfusion of tubular tissues, allowing a wide range of biological applications, and direct access to vascularized tissues.



Vascularized liver spheroids in the OrganoPlate® Graft. Learn more: [mimetas.com/app-notes](https://mimetas.com/app-notes)

# OrganoPlate® Caco-2

**The OrganoPlate® Caco-2 is an OrganoPlate® 3-lane featuring ready-to-use Caco-2 tubules.**

## Assay ready gut tubules

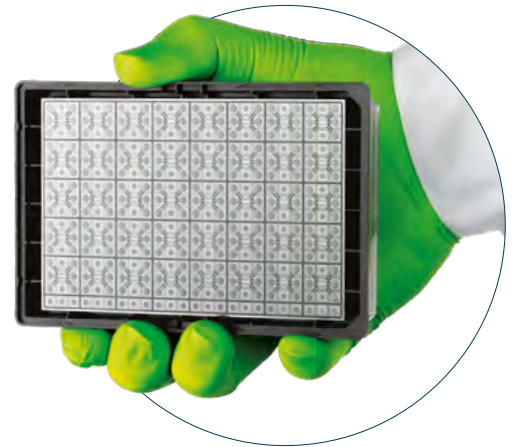
38 ready-to-use Caco-2 tubules, seeded against collagen I, allowing you to perform assays right away.

## Supporting a range of applications

Study toxicity, transport, use it for disease modeling or for fundamental research on the intestinal barrier.

## Apical and basal access

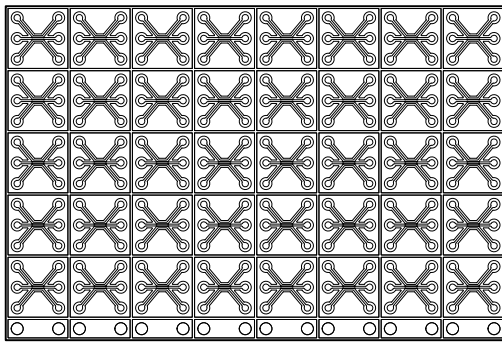
Perfused Caco-2 tubules, allowing barrier integrity, transporter and permeability assays.



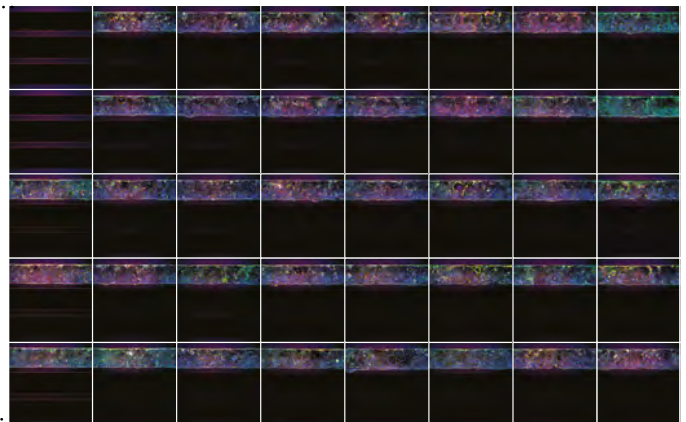
## OrganoPlate® Caco-2

- 40 tissue culture chips with 38 ready-to-use Caco-2 tubules, 2 control chips without cells
- 3 adjacent channels

[read more](#)



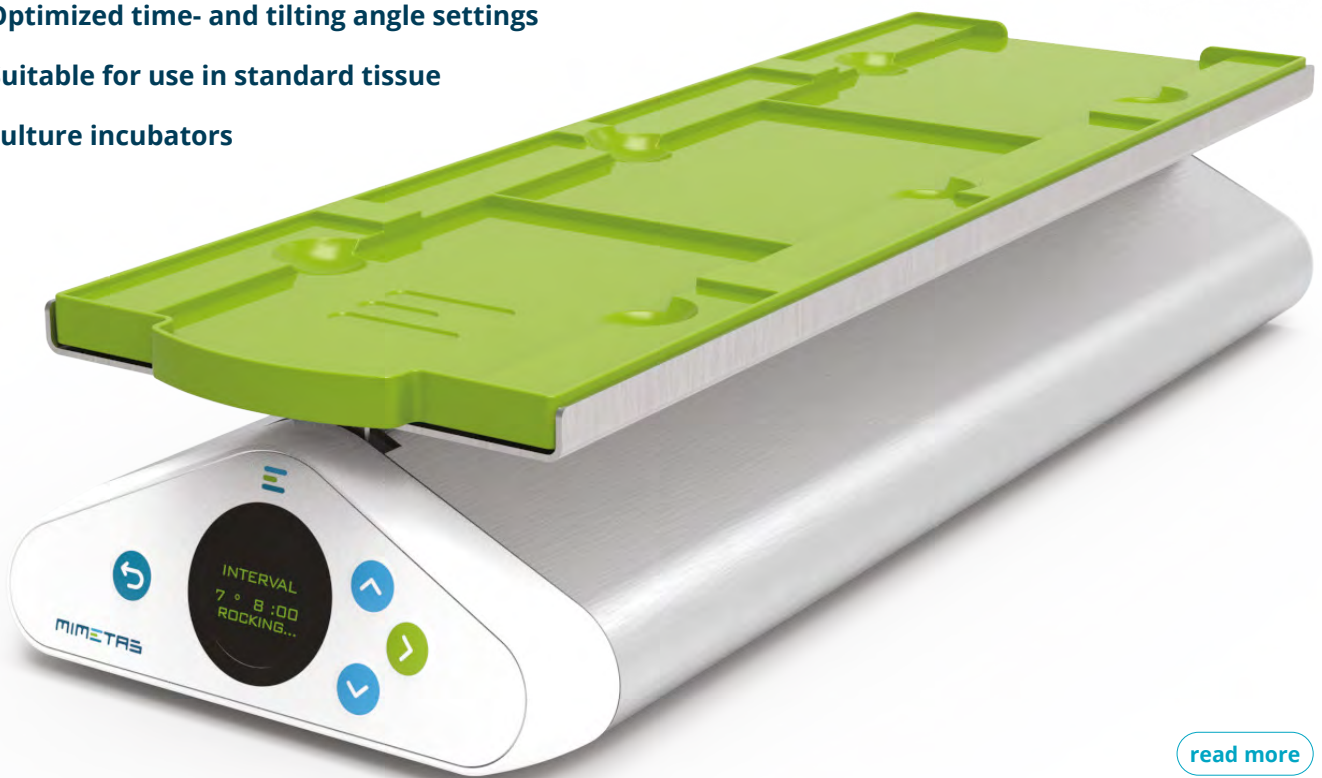
38 Caco-2 tubules  
seeded against Collagen I



# OrganoFlow<sup>®</sup> perfusion rocker

The OrganoFlow<sup>®</sup> drives precisely-controlled perfusion flow in the OrganoPlate<sup>®</sup>

- Optimal control of perfusion flow in OrganoPlates
- Pump- and tube-free perfusion of your cultures
- Optimized time- and tilting angle settings
- Suitable for use in standard tissue culture incubators



[read more](#)



# OrganoTEER®

**The OrganoTEER® is a high-throughput, automated TransEpithelial Electrical Resistance (TEER) measurement platform compatible with the OrganoPlate® 3-lane.**

## **High-throughput TEER measurements**

Measure up to 40 samples at once in under a minute.

## **Assessment of barrier function under physiological conditions**

Evaluate epithelial function under flow, without interference of artificial membranes.

## **Obtain TEER values from all your samples in real-time**

While leaving your cells intact and undisturbed.

## **Perform time-lapse measurements**

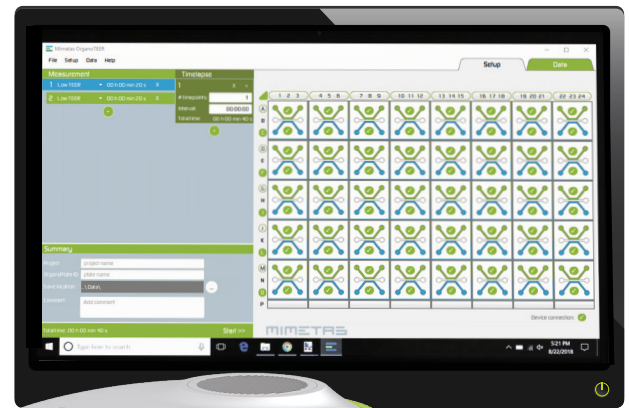
Perform long-term time-lapse studies and save time for other experiments.

## **User-friendly device and software**

Intuitive system, easy to maintain.

## **Supporting a range of applications in high-throughput**

Suitable for research on *in vitro* barrier models of: gut, blood-brain-barrier, kidney, and more.



[read more](#)

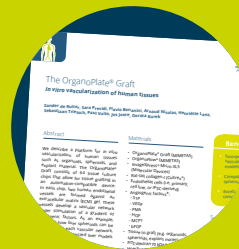
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