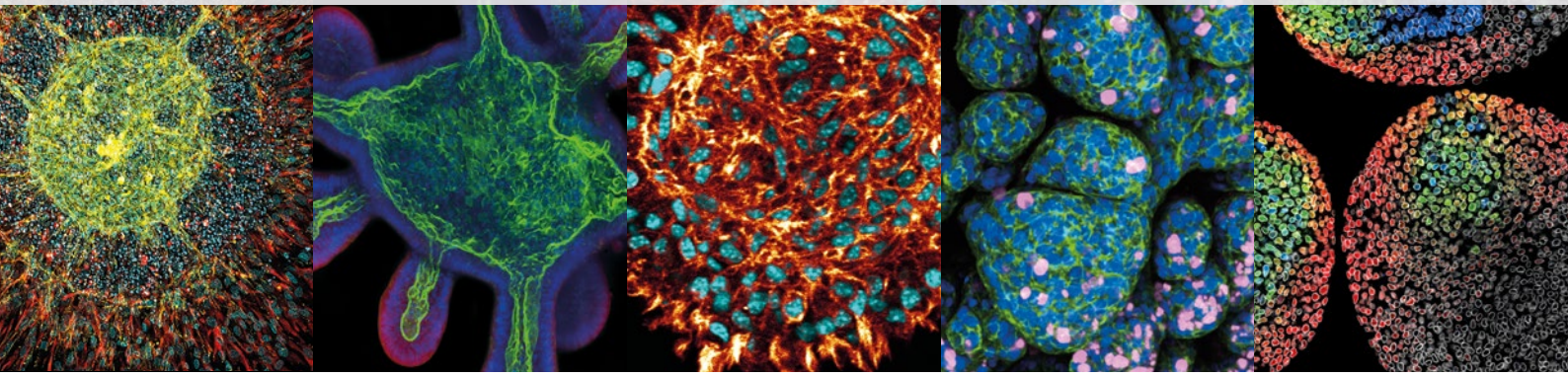
cells in focus ibidi®

Advanced 3D Cell Culture Solutions

Easy-to-Use and Microscopy-Optimized



High-Content Imaging

Matrix

Organoids

Spheroids

Invasion

Scaffolds

3D Culture

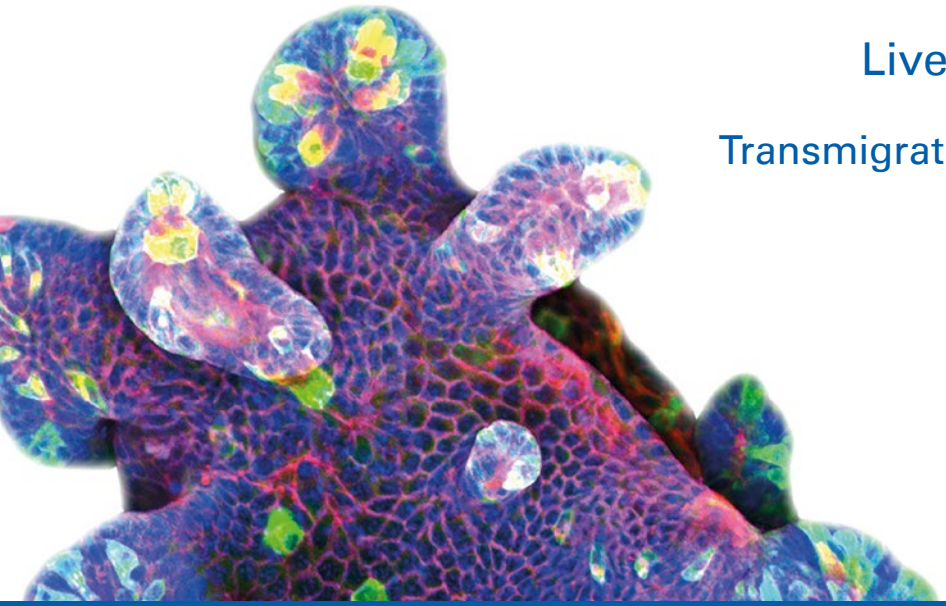
Static and Dynamic Cell Culture

Tumor Models

Hydrogel

Live Cell Imaging

Transmigration



Images in order of appearance by:

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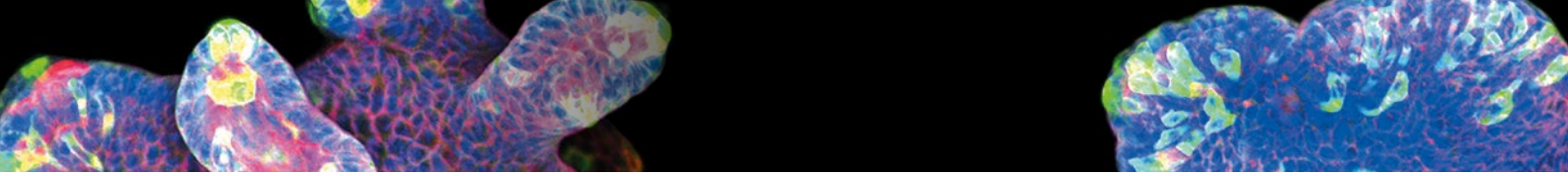
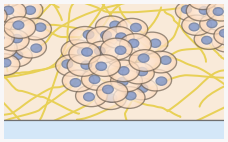
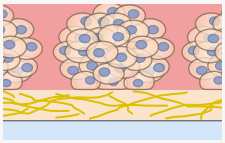


Scaffold-Based

Hydrogel- or scaffold-based systems provide a 3D microenvironment that closely mimics *in vivo* tissue conditions by structural and biochemical support.



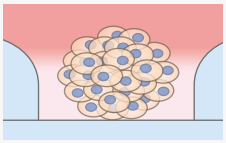
3D gel matrix or scaffold



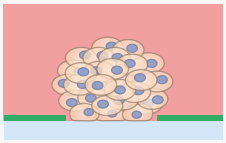
3D gel surface

Scaffold-Free

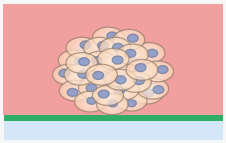
Cells self-assemble into 3D structures without the need for external scaffolds or hydrogels—simple to use, highly reproducible, and ideal for imaging and assay-based analysis.



Microwells with a Bioinert (ULA) surface



Micropatterns: confined adhesive spots

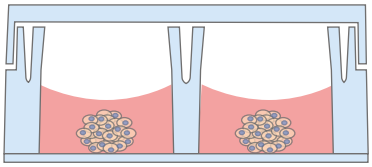


Bioinert (ULA) surface

Static 3D Cell Culture

Moving beyond traditional 2D culture, 3D aggregates create more realistic *in vitro* models that closely mimic *in vivo* conditions. They enable the study of complex cell–cell and cell–matrix interactions in a physiologically relevant 3D environment. ibidi offers a range of specialized 3D cell culture labware, optimized for creating 3D models across a wide variety of research applications.

Open Well Formats



Flat Gel Surfaces for 3D and Angiogenesis

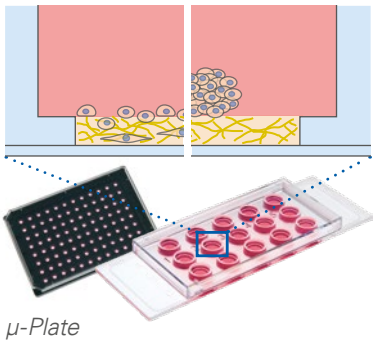
- Well-in-a-well technology creates flat, meniscus-free gels; cells are positioned within a narrow focal plane
- Cost-effective minimal gel usage (only 10 µl per well)
- Multiwell labware formats ideal for high throughput and standardized workflows

3D Gel Interface Optimized for Microscopy

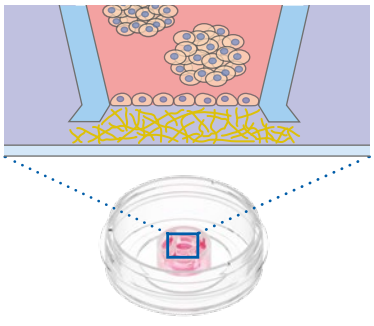
- Silicone insert with fluidic access to the basal and apical side of the gel
- Supports 3D invasion and transmigration assays
- Membrane-free design for unrestricted microscopy access

Micropatterning for Pre-defined 3D Cell Adhesion

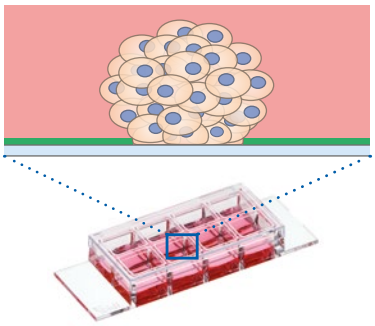
- Confined adhesive spots (ibiTreat) integrated in the non-adhesive Bioinert (ULA) surface
- Ready-to-use labware to create spheroids and organoids from a cell suspension
- Consistent and reproducible 3D cell culture, optimized for microscopy



µ-Plate 96 Well 3D *µ-Slide 15 Well 3D*

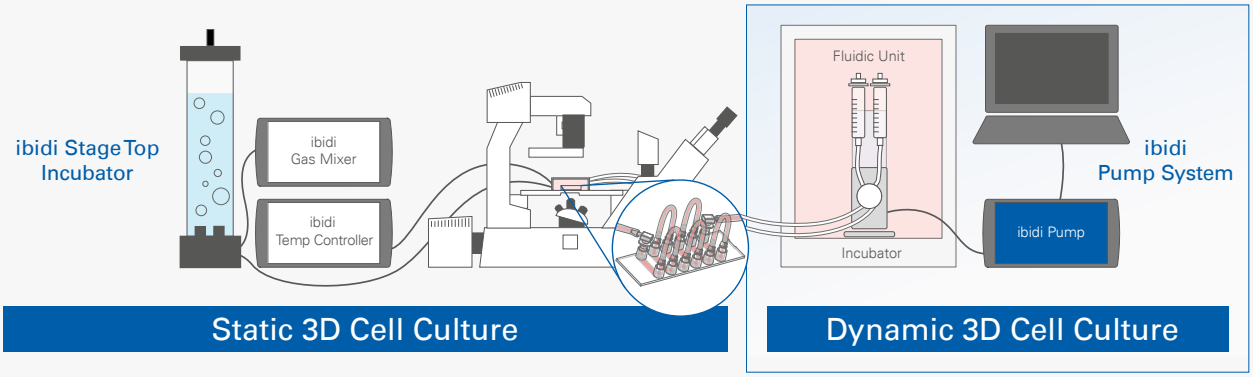


micro-Insert 3D in µ-Dish 35 mm, high



µ-Slide 8 Well high µ-Pattern ibiTreat

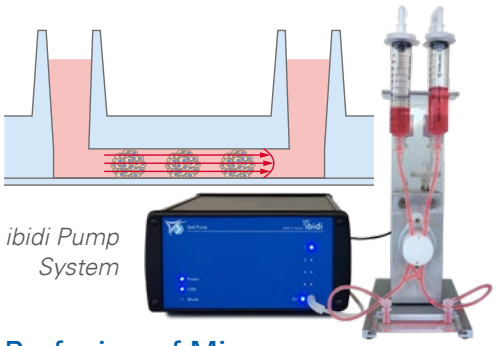
ibidi Setup Overview for Imaging 3D Static and Dynamic 3D Cell Cultures



Dynamic 3D Cell Culture

Elevate your 3D cell culture experiments with the advanced ibidi labware and perfusion systems. Designed for seamless integration, they support long-term cultivation of spheroids, organoids, and other 3D models. Air pressure-driven fluid flow enables continuous media recirculation, maintaining precise flow rates or shear stress for days, weeks, or even months.

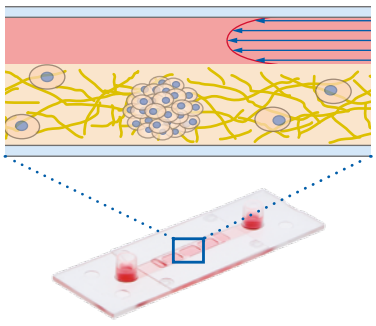
Channel Slides



ibidi Pump System

Dynamic Flow of 2D/3D Cell Culture in a Matrix

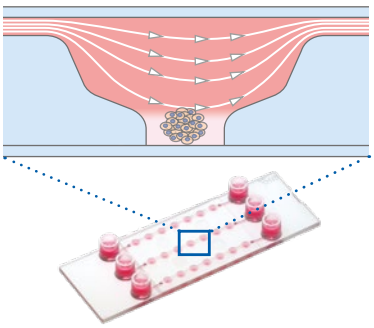
- Wells for gel casting connected by channels; controlled flow over a customizable 3D microenvironment
- Optimized for 2D and 3D co-culture to study drug transmigration across a cell barrier into a gel matrix
- Combines accessibility with perfusion compatibility



µ-Slide I Luer 3D

Long-Term 3D Cell Culture in Microwells

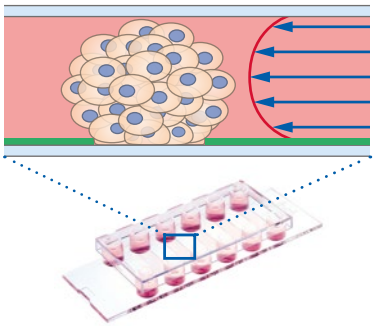
- Perfusion-based 3D bioreactor; formation and cultivation of spheroids/organoids
- Optimized for high-resolution microscopy
- Controlled perfusion without direct flow exposure to minimize movement and washout



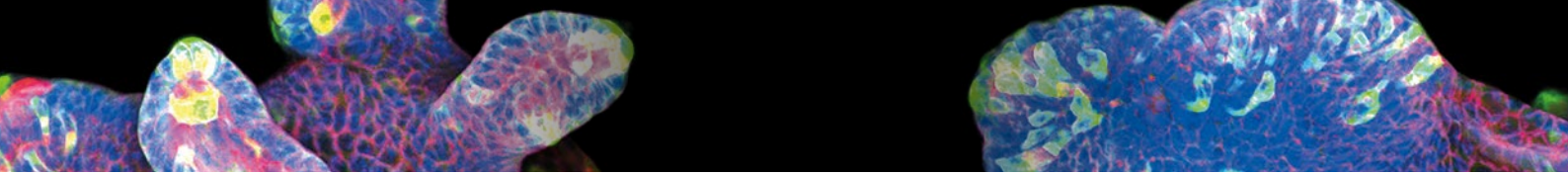
µ-Slide Spheroid Perfusion

Perfusion of Micropatterned 3D Cell Culture

- Perfusable channels with ibiTreat micropattern for defined cell adhesion
- Ready-to-use labware to create spheroids and organoids from a cell suspension
- Precise positioning of cells on the coverslip allows easy imaging



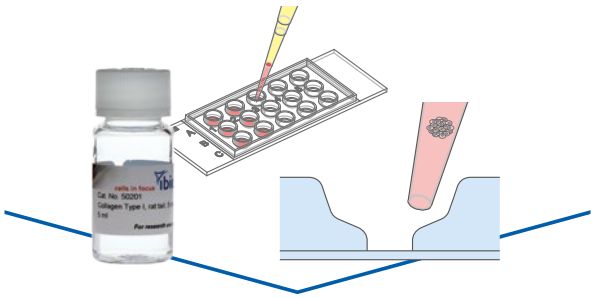
µ-Slide VI$^{0.4}$ µ-Pattern ibiTreat



ibidi Solutions for Your 3D Cell Culture Assay

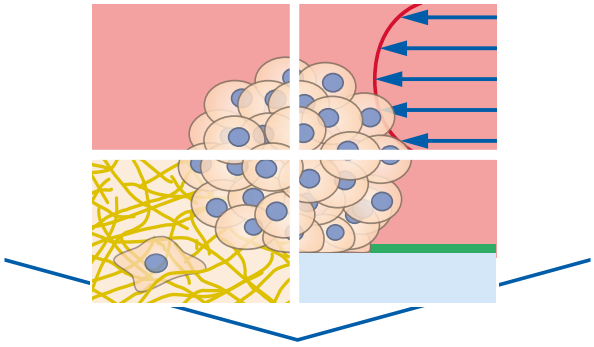
Sample Preparation

Choose from a broad portfolio of labware optimized for 3D cell culture and microscopy.



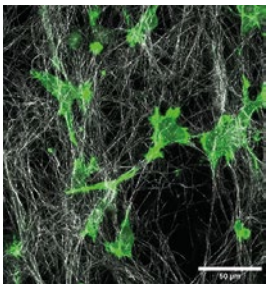
3D Cell Cultivation

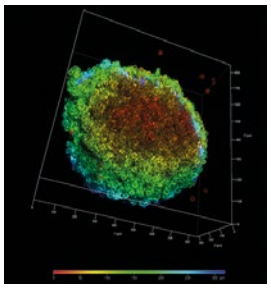
Perform your 3D assay of choice using tailored ibidi solutions.



Imaging and Analysis

Easily analyze your assays using live cell imaging, immunofluorescence stainings, and more methods.





ibidi Collagen Type I

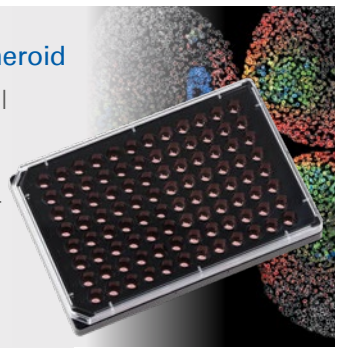
Enhance your research with our high-quality Collagen, providing a natural extracellular matrix for superior cell attachment, proliferation, and differentiation

ibidi Stage Top Incubators

Maintain stable physiological conditions during live cell experiments on inverted microscopes

µ-Plate 96 Well Spheroid

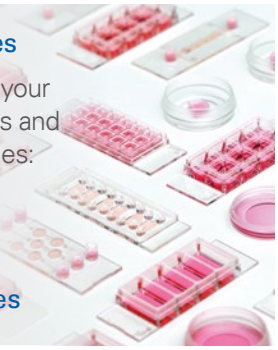
Upscale your 3D cell culture experiments with our 96-well format, offering high-throughput 3D cell growth



Order Your Free Samples

Test the ibidi solutions for your 3D cell culture experiments and choose up to 3 free samples:

ibidi.com/
freesamples



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