![ibidi logo — cells in focus]

Angiogenesis Assays

Perform Tube Formation and
Sprouting Assays in 2D and 3D

✓ **Brilliant Visualization of Cells**

No meniscus formation—all cells are in one focal plane

✓ **Cost-Effective Experiments**

Only 10 µl gel per well needed

✓ **Objective and Reproducible Data Analysis**

Results within minutes using FastTrack AI automated image analysis

Applications:

- Tube formation and angiogenesis assays
- Sprouting assays
- 3D cell culture
- Immunofluorescence staining

Additional equipment for researchers working with endothelial cells:

µ-Slide I Luer Family	*ibidi Pump System*	*ibidi Stage Top Incubation System*	*µ-Dish 35 mm, high*	*FastTrack AI Tube Formation*
Perfusion		**Live Cell Imaging**		**Image Analysis**

Angiogenesis Assays
Perform Tube Formation and Sprouting Assays in 2D and 3D

Sample Preparation

Live Cell Imaging

0 h
2 h
6 h
200 µm

Data Analysis

Average Loop Area
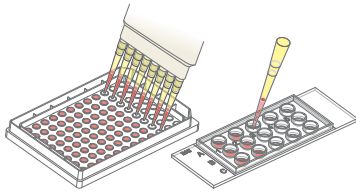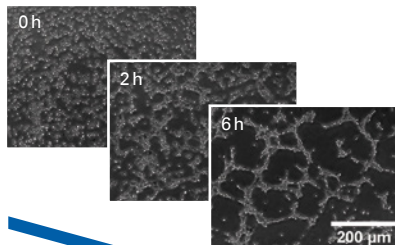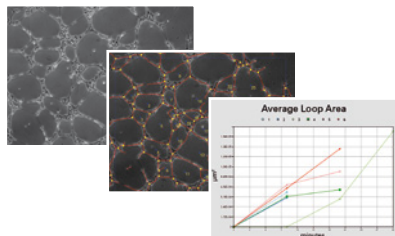
ibidi's "Well-in-a-Well" Feature

ibidi provides labware with a specialized geometry for easy and convenient conduction of angiogenesis and tube formation assays. The µ-Slide Angiogenesis with 15 wells is designed for low throughput assays, and the µ-Plate Angiogenesis 96 Well is ideal for large scale applications.

After the Matrigel is filled in and given time to solidify, the cells can be seeded on top of it for tube formation analysis. Due to the "well-in-a-well" technology, the amount of gel needed is reduced to 10 µl per well, and no meniscus is formed.
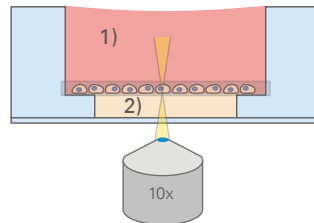
µ-Slide / Plate Angiogenesis

1) Planar air-liquid interface: good phase contrast all over the observation area

2) Planar gel surface: all cells are in one optical plane

Volume of Matrigel: 10 µl
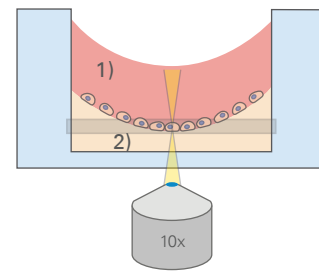
Standard Well

1) Meniscus on air-liquid interface: poor phase contrast in most of the observation area

2) Meniscus on the gel surface: not possible to focus on all cells simultaneously

Volume of Matrigel: 100 µl

FastTrack AI: Data Analysis Within Minutes

Using the web-based tool, Tube Formation FastTrack AI Image Analysis, microscopy data can be automatically analyzed. After uploading the data to your FastTrack AI account, you will receive a detailed analysis report within minutes.

Create your free FastTrack AI account and test the software with your experiments.

FREE SAMPLES: ibidi.com/free-samples

Technical Details
µ-Slide / µ-Plate Angiogenesis:

Number of wells	15 / 96
Volume inner well	10 µl
Ø inner well	4 mm
Volume upper well	50 / 70 µl
Ø upper well	5 mm
Growth area per inner well	0.125 cm²
Bottom: ibidi Polymer Coverslip (ibidi Glass Coverslip for the µ-Slide Angiogenesis Glass Bottom)	

Ordering Information:

Cat. No.	Description	Pcs. / Box
81506	µ-Slide Angiogenesis ibiTreat: #1.5 polymer coverslip, tissue culture treated, sterilized	15
81501	µ-Slide Angiogenesis Uncoated: #1.5 polymer coverslip, hydrophobic, sterilized	15
81507	µ-Slide Angiogenesis Glass Bottom: #1.5H (170 µm +/- 5 µm) D 263 M Schott glass, sterilized	15
89646	µ-Plate Angiogenesis 96 Well ibiTreat: #1.5 polymer coverslip, tissue culture treated, sterilized	15
32100	Tube Formation FastTrack AI Analysis Pack	