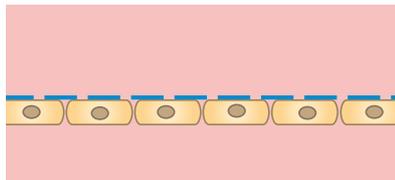


μ-Slide Membrane ibiPore Flow

Transmigration and Transport Studies
Through a Porous Glass Membrane

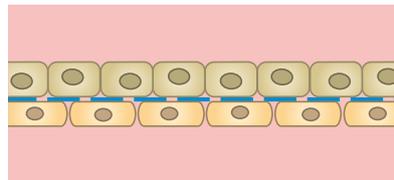
- ✓ Brilliant optical quality through the thin, porous glass membrane
- ✓ Full fluidic access to the apical and basal sides of adherent cells
- ✓ Ideal for the establishment of lung models with air-liquid interface

Application Examples



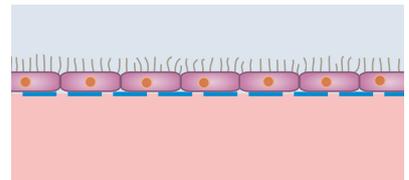
Endothelial Barrier

A cell monolayer is cultivated on the upper or the lower side of the membrane, either under static or under flow conditions.



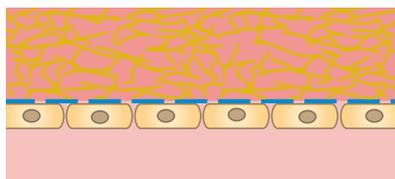
Co-Culture and Cell Barrier Assays

Two separate cell monolayers are cultivated on each side of the membrane for signaling, co-culture, and transport studies.



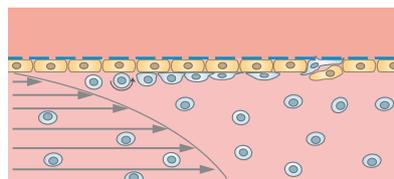
Lung and Skin Models with Air-Liquid Interface (ALI)

A polarized cell monolayer is seeded on one side of the membrane, which is exposed to airflow.



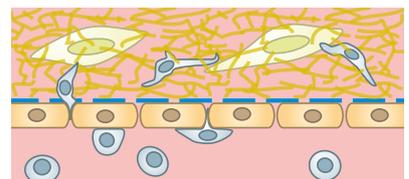
Apical-Basal Cell Polarity Assays

Chemical factors inside of a 3D gel matrix lead to the polarization of a cell monolayer that is cultured on the other side of the membrane.



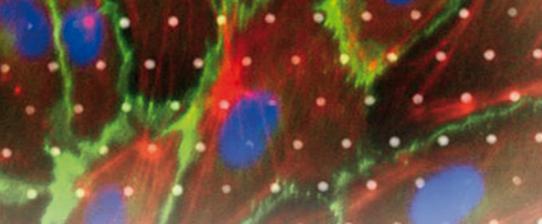
Trans-Membrane Migration in 2D

A cell monolayer is cultivated on one side of the membrane to observe rolling, adhesion, and transmigration of leukocytes.



Cell Transport in a 3D Gel Matrix

Rolling, adhesion, and transmigration of leukocytes towards cancer cells in a 3D matrix can be observed under flow.



μ-Slide Membrane ibiPore Flow

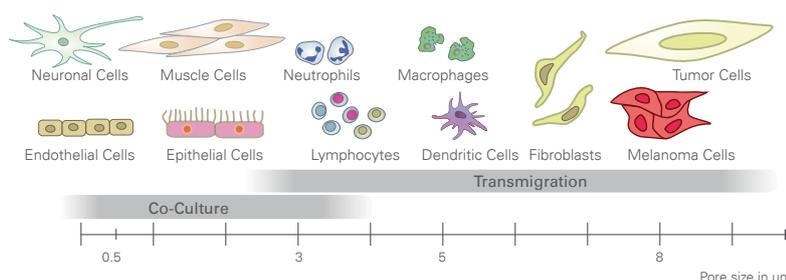
Transmigration and Transport Studies Through a Porous Glass Membrane

Technical Features:

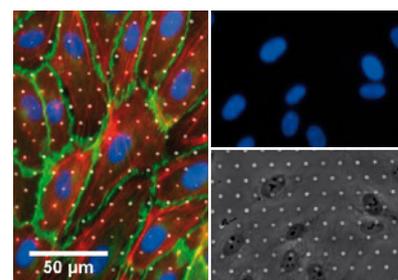
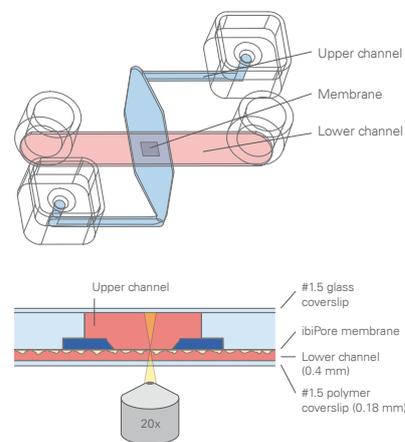
- Cross-channel structure with a porous optical membrane in between (SIMPore's Microporous G-FLAT™ glass membrane)
- Excellent optical properties, comparable to a coverslip
- Pore sizes 0.5 μm, 3 μm, 5 μm, or 8 μm available
- Membrane thickness 0.3 μm (300 nm)
- For use with objective lenses with a working distance >0.5 mm
- Fully compatible with the ibidi Pump System
- Defined shear stress and shear rate levels

Recommended Pore Sizes and Porosities

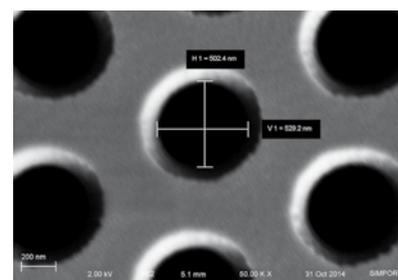
Pore Size/Porosity	Applications	Example Cell Types
0.5 μm pores, 20% porosity	Permeability and transport studies, co-culture models	Lung cells, epithelial cells
3.0 μm pores, 5% porosity	Transendothelial migration	Leukocytes (e.g., neutrophils, T cells, or B cells)
5.0 μm pores, 5% porosity	Invasion, migration	Monocytes, macrophages, lymphocytes
8.0 μm pores, 5% porosity	Invasion, migration	Cancer cells, fibroblasts, endothelial/epithelial cells, melanoma cells, glioma cells



Cross Section of the μ-Slide Membrane ibiPore Flow



Endothelial cells on a membrane with 0.5 μm pores.



SEM image of a porous glass membrane with 0.5 μm pores.

Ordering Information

Cat. No.	Description	Pcs./Box
85116	μ-Slide Membrane ibiPore 0.5μm/20% Flow ibiTreat	10
85126	μ-Slide Membrane ibiPore 3.0μm/5% Flow ibiTreat	10
85136	μ-Slide Membrane ibiPore 5.0μm/5% Flow ibiTreat	10
85146	μ-Slide Membrane ibiPore 8.0μm/5% Flow ibiTreat	10

To test for your application, choose the Trial Pack with 2 slides. Free samples are not available for this product.