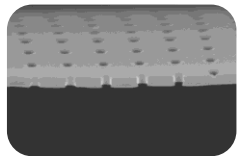


6 Benefits of the System

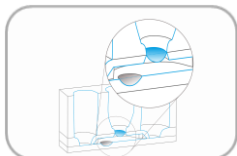
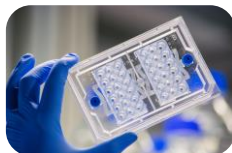


AXmembrane

This cell culture support is soft, porous and flexible, for better modeling the in vivo environment.

One plate 12 replicates

The AX12 includes 12 independent wells in an open and accessible design divided in two chips.



Biomechanical forces

3D cyclic stretch to stimulate the cells, keeping them functional and in a physiological shape.

User friendly

Easy installation and handling of the system without the need of any additional equipment.



High compatibility

The AX12 is compatible with your own laboratory equipment and conventional readouts.



Low compound absorption

The biocompatible plastics used in the system are designed to reduce molecule absorption.

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AlveoliX
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AlveoliX Organs-on-Chip Technology

Start your own Organs-on-Chip research

- Outmost physiological conditions
- Study cells in a dynamic environment
- Easy barrier monitoring
- Simple plug and play

AX Barrier-on-Chip System

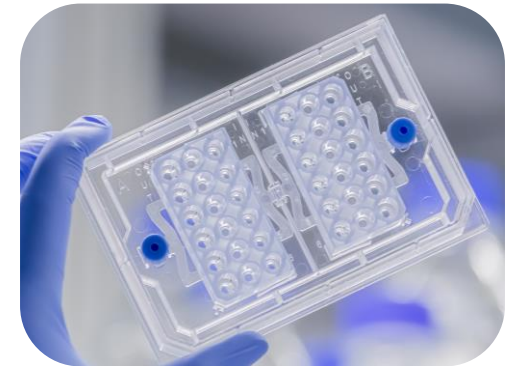
The AX Barrier-on-Chip System is an easy-to-use platform to model of a wide range of tissue barriers.



AX12

The AX12 is the cell culture consumable and is based on a 96-well plate format. It consists of two chips supported by a plate. This two-part design enables the seeding of the cells directly on either side of the ultrathin AXmembrane.

- Accurate cell seeding
- Simple apical & basal sampling
- Submerged culture
- Air-liquid interface
- Dynamic and static environment



By culturing different cell types on the AXmembrane, biologically relevant cell models can be created. These models can be then used for safety, toxicity or efficacy testing.

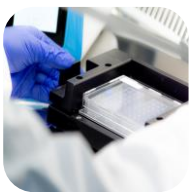
AXBreather

The AXBreather controls the deflection of the AXmembrane inside the AX12, recreating the 3D cyclic stretching motions.



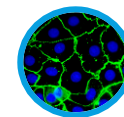
AXDock

The AXDock connects the AX12 with the AXBreather and the AXExchanger creating an air-tight sealing.



AXExchanger

By pneumatically controlling the valves of the AX12, the AXExchanger enables a fluid flow for initial chip filling and medium exchange.



Monoculture

- Epithelial cells
- Endothelial cells
- Fibroblasts
- & more

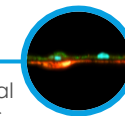


Barrier disruption

- Inflammation
- Infection (bacterial/viral)

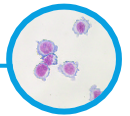
Coculture

- Epithelial/endothelial
- Epithelial/fibroblasts
- & more



Immunocompetent

- PBM C
- Macrophages



The AX12 allows you to translate your standardized protocols and read-outs on-chip. These include but are not limited to ELISA, transcriptomics, viability and toxicity assays, TER measurements and permeability assays as well as live-cell and high-resolution imaging.