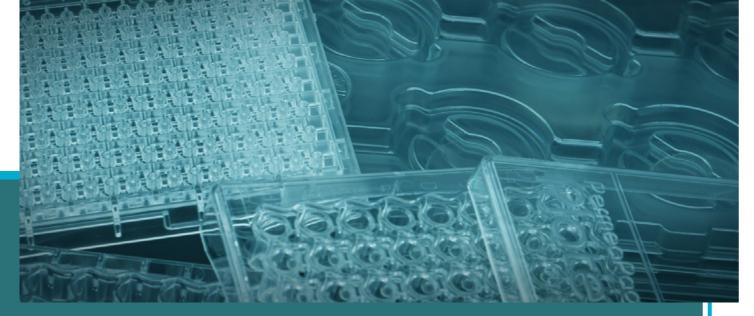


PHABIOC

MORE INSIGHTS IN RESEARCH

Consumables and tools for better and more efficient drug discovery and development



About PHABIOC

We at PHABIOC are constantly providing our customers new innovative consumables and analysis tools to improve research and development in the biotechnology, pharmaceutical and chemical industries. On the one hand, with our products we want to make experiments automatable in order to be able to design processes more efficiently. And on the other hand with our products we want to replace, reduce or improve animal testing (3R'S).

By consistently building up our product portfolio, we address a variety of applications. Our ambition is to develop new standards again and again.

Open Innovation

PHABIOC wants to pursue Open Innovation because we believe that more can be achieved by joining forces and working together than by working alone. We want to break down corporate boundaries and realize innovations.

We are always open to new product ideas from academic institutions or industry partners and are happy to enter into cooperations in order to become successful together.

Individual Lab Consumables and **Biomimetic Barriers**

Do you need a manufacturer or a development partner for your laboratory consumables (e.g. microwell plate) or biomimetic barriers? Then you will find in us the right partner to realize your products

Scientific Consulting

Our products address the most current scientific topics in research and development. Therefore we offer scientific consulting for the best customer support. This is done by experts in the respective field.

Table of Content

- PermeaPad® GIT Barrier PermeaPad® GIT Barrier is a cell free biomimetic barrier. It is used to predict passive mass transfer of API/NCE in vitro.
- PermeaPlain Barrier PermeaPlain Barrier is an uncoated regenerated cellulose hydrate membrane. It enables the screening of the passive mass transfer of novel drugs.
- PermeaPad® Skin Barrier PermeaPad® Skin Barrier is a cell free biomimetic S.10 barrier. It is used for in-vitro permeation testing (IVPT)
- PermeaPad® GIT Plate Plate supports artificial membrane strategies for predicting passive transport of API's/NCE's
- PermeaPlain Plate is a new multi-well plate PermeaPlain Plate system based on an uncoated regenerated cellulose hydrate.
- Accessories To further improve the performance of our products, we offer accessories that can be used together with our products.

Page 2 About us Product brochure Page 3







PermeaPad

Introducing PermeaPad®, a New Frontier in In Vitro Diffusion Assays!

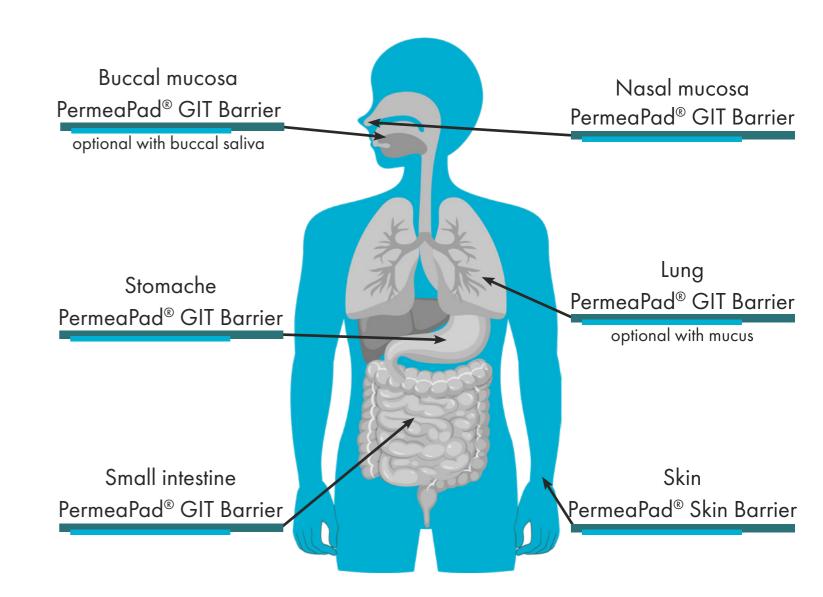
We're thrilled to share a significant development at PHABIOC - the launch of our innovative product line, PermeaPad[®]. As part of our ongoing commitment to revolutionize drug development, PermeaPad[®] introduces a realm of possibilities in in vitro diffusion assays.

What is PermeaPad®?

PermeaPad® is a cutting-edge brand within the PHABIOC family, focusing on artificial biomimetic barriers designed for in vitro diffusion assays. These barriers emulate various biological interfaces, enabling precise testing of drug permeability and interactions.

Our Current Milestone

We're proud to present our initial PermeaPad® barrier, meticulously designed to simulate the oral mucosa, nasal membrane, and gastrointestinal tract. This achievement marks the beginning of our journey to create accurate in vitro models for drug diffusion studies.









PermeaPad® GIT Barrier

The self-developed biomimetic barrier enables an innovative approach of in-vitro permeability assays.*

Measurements with the PermeaPad® GIT Barrier can be conducted easily, fast and reproducible. The simulation of the passive mass transport can be executed by using the PermeaPad® GIT Barrier in a conventional Franz-cell, side-by-side diffusion cell or other setups. You receive insights about the permeability of compounds. The barrier is very resistant and storable due to its innovate and unique structure. These characteristics allow measurements in a wide pH range. The experiment-specific conditions can be chosen according to the analyzed substance.

* Only for research purposes. Not for use in diagnostic procedures.



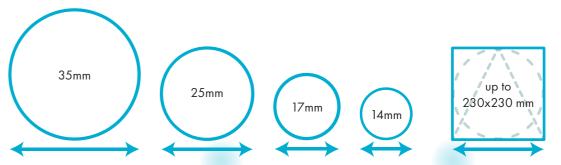
Page 6











Always the right size for your application

To ensure that our barrier can be used in as many setups as possible, there are different sizes of membrane. Our standard sizes can be used in conventional setups of Franz cells, side by side cells. For special setups we can realize individual shapes and sizes with our barrier.

Product number	Size	Quantity	Price
300314	14mm	50 pcs	On request
300317	17mm	50 pcs	On request
300325	25 mm	50 pcs	On request
300335	35mm	50 pcs	On request
300300	individual	individual	On request



PermeaPad® GIT Barrier PermeaPad® GIT Barrier Page 7



PermeaPlain Barrier

Based on an uncoated regenerated cellulose hydrate membrane, the PermeaPlain Barrier enables the efficient investigation of passive mass transfer (mass transfer screening) of novel drugs.* Regardless of the polarity of the compound, the diffusion of individual drugs through a membrane can be analyzed. Measurements with the barrier are simple, fast as well as reproducible. The simulation of passive mass transport can be performed by using the PermeaPlain Barrier in a conventional Franz cell, side-by-side diffusion cell or other setups. We recommend the side-by-side diffusion cells, Franz cells and custom diffusion cells.

* Only for research purposes. Not for use in diagnostic procedures.

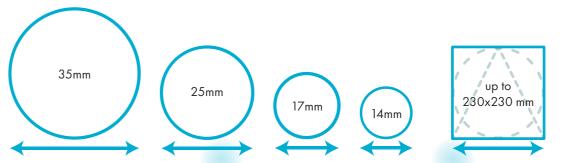












Always the right size for your application

To ensure that our barrier can be used in as many setups as possible, there are different sizes of membrane. Our standard sizes can be used in conventional setups of Franz cells, side by side cells. For special setups we can realize individual shapes and sizes with our barrier.

Product number	Size	Quantity	Price
300414	14mm	50 pcs	135,15€
300417	17mm	50 pcs	135,15€
300425	25 mm	50 pcs	159,00€
300435	35mm	50 pcs	182,50€
300400	individual	individual	On request



Page 8 PermeaPlain Barrier PermeaPlain Barrier PermeaPlain Barrier

PermeaPad® Skin Barrier (coming soon)

The self-developed biomimetic skin barrier enables an innovative approach of in-vitro permeation testing (IVPT)*. Measurements with the PermeaPad® Skin Barrier can be conducted easily, fast and reproducible. The simulation of the passive mass transport can be executed by using the PermeaPad® Skin Barrier in a conventional Franz-cell, side-by-side diffusion cell or other transdermal setups. You receive insights about the permeability of compounds. The barrier is very resistant and storable due to its innovate and unique structure. The experiment-specific conditions can be chosen according to the analyzed substance.

* Only for research purposes. Not for use in diagnostic procedures.



Page 10

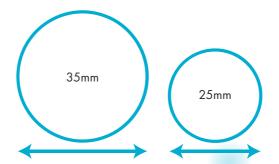


PermeaPad® Skin Barrier









Always the right size for your application

To ensure that our barrier can be used in as many setups as possible, there are different sizes of membrane. Our standard sizes can be used in conventional setups of Franz cells, side by side cells. For special setups we can realize individual shapes and sizes with our barrier.

Product number	Size	Quantity	Price
300525	25 mm	50 pcs	On request
300535	35mm	50 pcs	On request



PermeaPad® Skin Barrier Page 11





PermeaPad® GIT Plate

The 96-well microplate enables a breakthrough in high-throughput permeability screening. The innovative design and the integrated PermeaPad® GIT Barrier enable in vitro permeability assays.* Passive mass transport is simulated by the PermeaPad® GIT Barrier. Measurements with the PermeaPad® GIT Plate are easy, fast and reproducible. Due to the robustness of the membrane, fluids/environment parameters can be selected to simulate in vivo situations without the need for animal testing. The Permea Pad® GIT Plate can be used for screening and ranking of new chemical entities (NCEs) and formulations. It can also be used with pipetting platforms.

* Only for research purposes. Not for use in diagnostic procedures.



Page 12



PermeaPad® GIT Plate



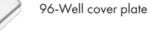




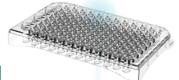
PermeaPad® GIT Plate

The plate consists of a bottom plate, insert plate (with integrated barrier) and a cover.

Our standard PermeaPad® GIT Plate can be used for experiments when quantifying samples with a photometer.







96-Well Insert Platte with integrated barrier



96-Well bottom Plate







PermeaPad® GIT Plate Page 13



PermeaPlain Plate

Page 14

The developed 96-well plate system enables an innovative breakthrough in high-throughput mass transfer screening*. The PermeaPlain Plate is a multi-well plate system based on a permeable cellulose membrane (PermeaPlain Barrier) for the efficient investigation of the passive mass transfer of new drugs*.

Regardless of the polarity of the substance, the diffusion of different drugs may be analyzed through a membrane. Measurements with the PermeaPlain Plate are simple, fast and reproducible.

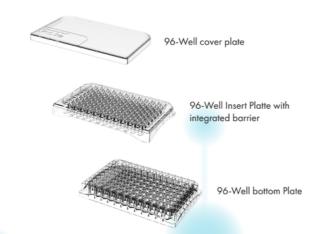
* Only for research purposes. Not for use in diagnostic procedures.











PermeaPlain Plate

The plate consists of a bottom plate, insert plate (with integrated barrier) and a cover.

Our standard PermeaPlain Plate can be used for experiments when quantifying samples with a photometer.

Product number	Quantity	Price
300110	5 pcs	595,00€





PermeaPlain Plate PermeaPlain Plate PermeaPlain Plate





Membrane Pipette

Antistatic 68 mm ESD vacuum pipette made of flexible, antistatic rubber. Perfect for working with the PermeaPad® Barrier.

Easy to use, securely held and precisely aligned with 4 suction tips.

On request

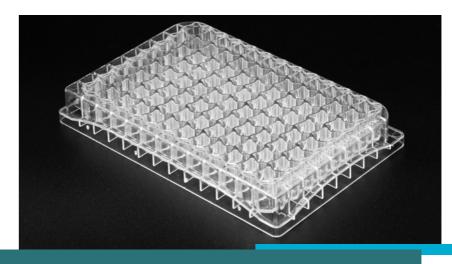


Magnetic Stirrer

Ultra-flat, wear-free magnetic stirrer with 96 stirring positions, optimised for working with 96-well microplates. MIXdrive 96 MTP (2mag.de)

All 2mag products are "Made in Germany" with a 3-years warranty.

on request



96 Well Bottom Plate

Quantity: 15 pcs

Standard microtiter plate: 96 well bottom plate with flag-shaped wells made from polystyrene (PS). Ideal for micro volume application*, e.g. permeation assays with the PermeaPad® Insert Plate (available with the purchase of the PermeaPad® Plate). Use the bottom plate to be more flexible in your experimental setup with PermeaPad® Plate. The bottom plate can be used together with pipetting platforms.

* Only for research purposes. Not for use in diagnostic procedures.

on request







Page 19

Automated transdermal system

- Water jacket or dry heating
- Compatible with manual transdermal systems
- Can work with 6, 12, 18 or 24 cells
- Automated sampling and automated sample collecting
- Partial/integral sampling

on request



Automated flow through system

- Water jacket or dry heating
- Compatible with manual transdermal systems
- Can work with 6, 12, 18 or 24 cells
- Automated sampling and automated sample collecting
- Partial/integral sampling

on request



Manual transdermal system

- Water jacket or dry heating
- Compatible with automated systems
- Can work with up to 6 cells



Page 18



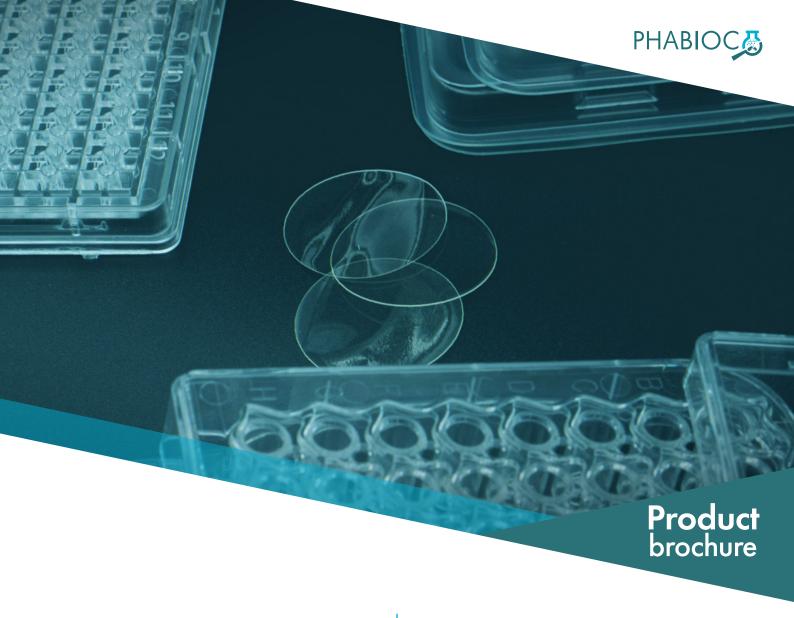
Economic models

- Water jacket heating
- Build-in heater circulator
- Vertical diffusion cells or side by side cells
- manual handling

on request







PHABIOC

MORE INSIGHTS
IN RESEARCH

CONTACT US

- www.phabioc.com
- <u>info@phabioc.com</u>
- in **PHABIOC**