



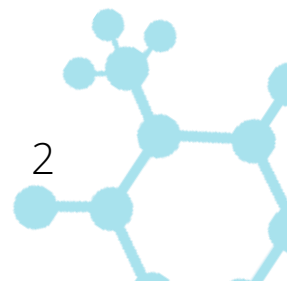
PermeaPad[®] GIT Plate

EN



Table of Contents

NOTES FOR THE MANUAL	3
SECURITY	4
ABSTRACT	4
TECHNICAL DATA	5
USER GUIDELINES	8
REFERENCES	11





Notes for the manual



Safety equipment

Notes with this symbol indicate that your personal protective equipment is to be worn



Manual

Notes with this symbol indicate that you have to carefully read the manual before use.



Information

Notes with this symbol indicate additional information.



Not for reuse

This is a disposable product. It is not allowed to use it more than once.



Usable until

The note with date indicates the best before date.



Batch and serial number

The letters and numbers following the symbol indicate the batch and serial number of the product.



Temperature limitation

The symbol indicates a temperature limit.

Qualification of Staff

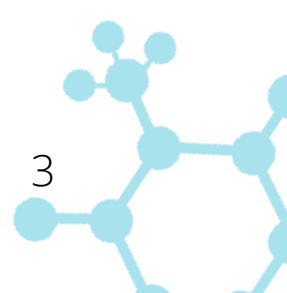
The use of the product is restricted to technically trained staff. Additionally the manual must be read and fully understood

Legal Notice

This publication replaces all previous versions. No part of this publication may be reproduced in any form without the written permission of PHABIOCC GmbH nor may any part be processed, duplicated or distributed using electronic systems without written permission of PHABIOCC GmbH. Reserve technical changes. All rights reserved.

Design changes in the interest of ongoing product improvement and changes in shape and color reserved. The scope of delivery may differ from product images. This document has been prepared with due care. PHABIOCC GmbH assumes no liability for any errors or omissions. The determination of valid measurement results, conclusions and measures derived therefrom are solely the responsibility of the user. PHABIOCC GmbH does not guarantee the correctness of the measured values or measurement results. Furthermore, PHABIOCC GmbH assumes no liability for errors or damage resulting from the use of the measured values.

© PHABIOCC GmbH





Security



Retain all safety instructions and instructions in order to consult them in the future.

This product may be used by children 14 years old or older, as well as by people with reduced physical, sensory or mental abilities or by people lacking experience and knowledge, if they have been supervised or instructed in the safe use of the device and understand the resulting hazards. Children are not allowed to play with the product.

- Do not use explosive substances with the product.
- Do not use strong chemicals with the product.
- Do not use the product after a fall. The product could have been damaged by the fall.
- The product is not a toy. Keep children and animals away.
- Protect the product from permanent direct sunlight.
- Do not open the product with a tool.
- Use the product only if adequate safety precautions have been taken at the workplace. Otherwise, do not use the product.



Observe the storage and operating instructions. If you store or transport the product improperly, the product may be damaged. Observe the information on handling (Chapter User Guidelines) and on storage of the product.



Do not reuse this product. Results of a used barrier are not reproducible after the product has been used for the first time and has made contact with the medium.



Wear protective equipment such as gloves, eye protection and protective clothing. Depending on which other products, substances or chemicals you use, further protective measures may be necessary. Pay particular attention to the respective safety data sheets for chemicals before using them.

Abstract

The developed 96-well plate system enables a breakthrough in high-throughput permeability screening. The innovative structure and plate-integrated biomimetic barriers (PermeaPad® GIT Barrier) enable *in vitro* permeability assays*. Measurements with the PermeaPad® Plate are simple, fast and reproducible. The PermeaPad® GIT Barrier simulates the passive mass transfer. Due to its unique and innovative composition the barrier is very robust, resistant and has a long shelf-life. As a consequence of these properties measurements are possible within a large pH range. Specific experimental conditions can be selected according to the substance studied.

* For research use only. Not for use in diagnostic procedures.



Technical Data

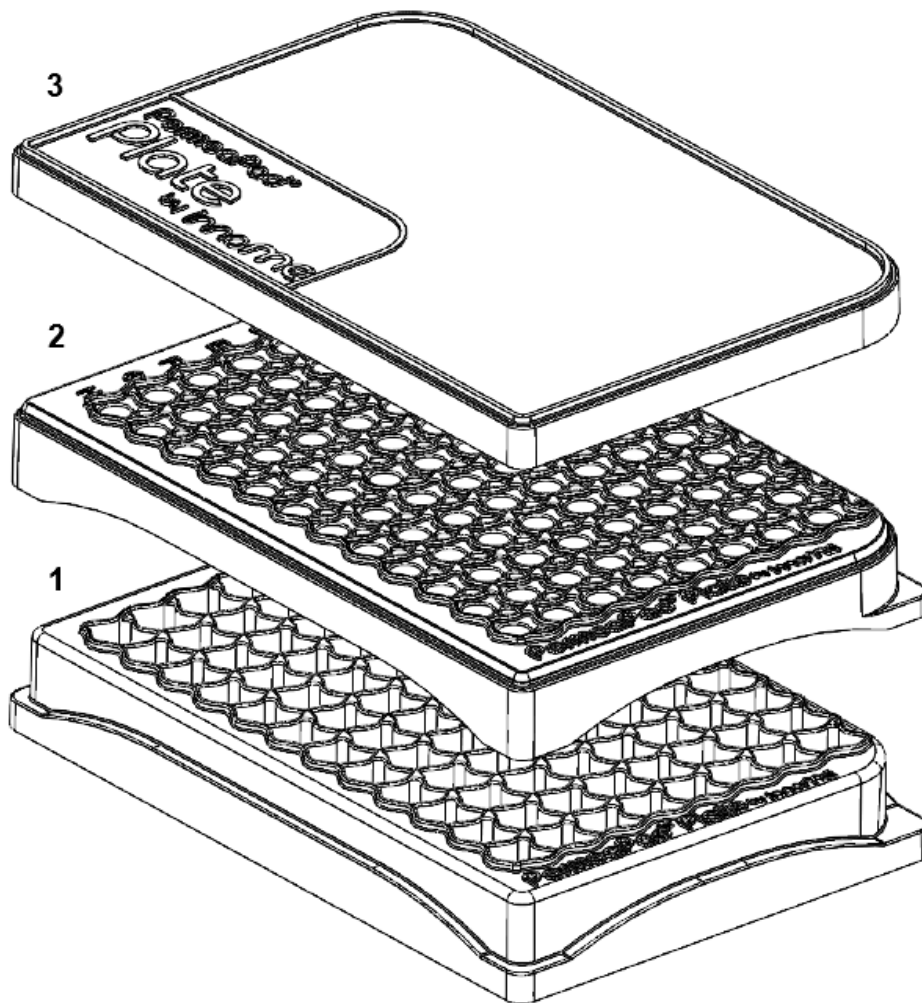
See data sheet PermeaPad® GIT Barrier:

<https://phabioc.com/en/media/>

See data sheet PermeaPad® GIT Plate:

<https://phabioc.com/en/media/>

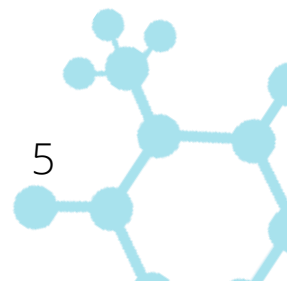
PermeaPad® GIT Plate:

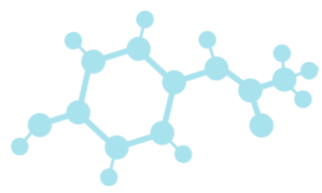


1: Bottom plate

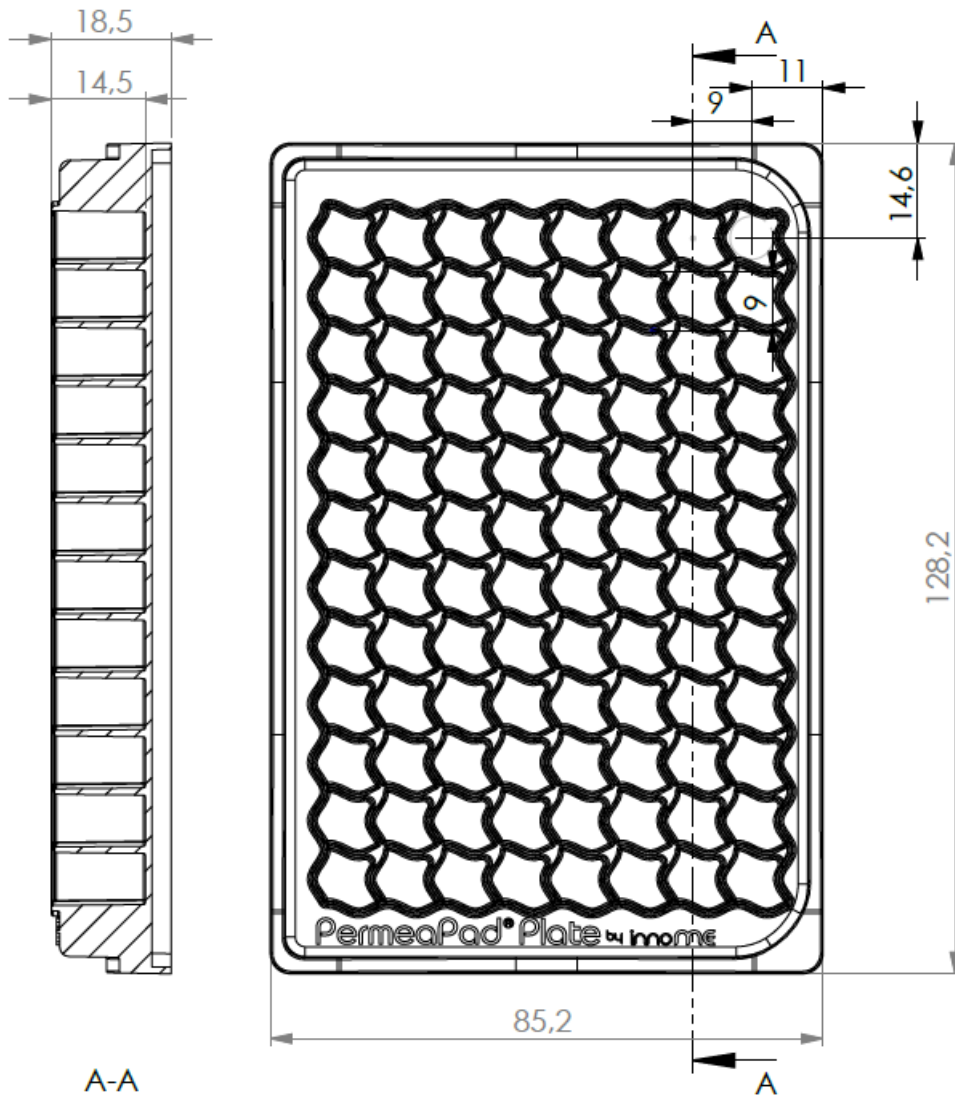
2: Insert-plate

3: Cover

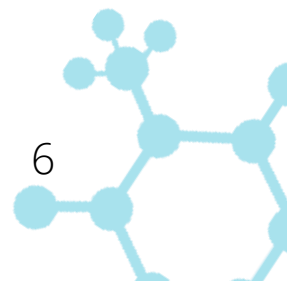




Measurements of the bottom plate (mm):

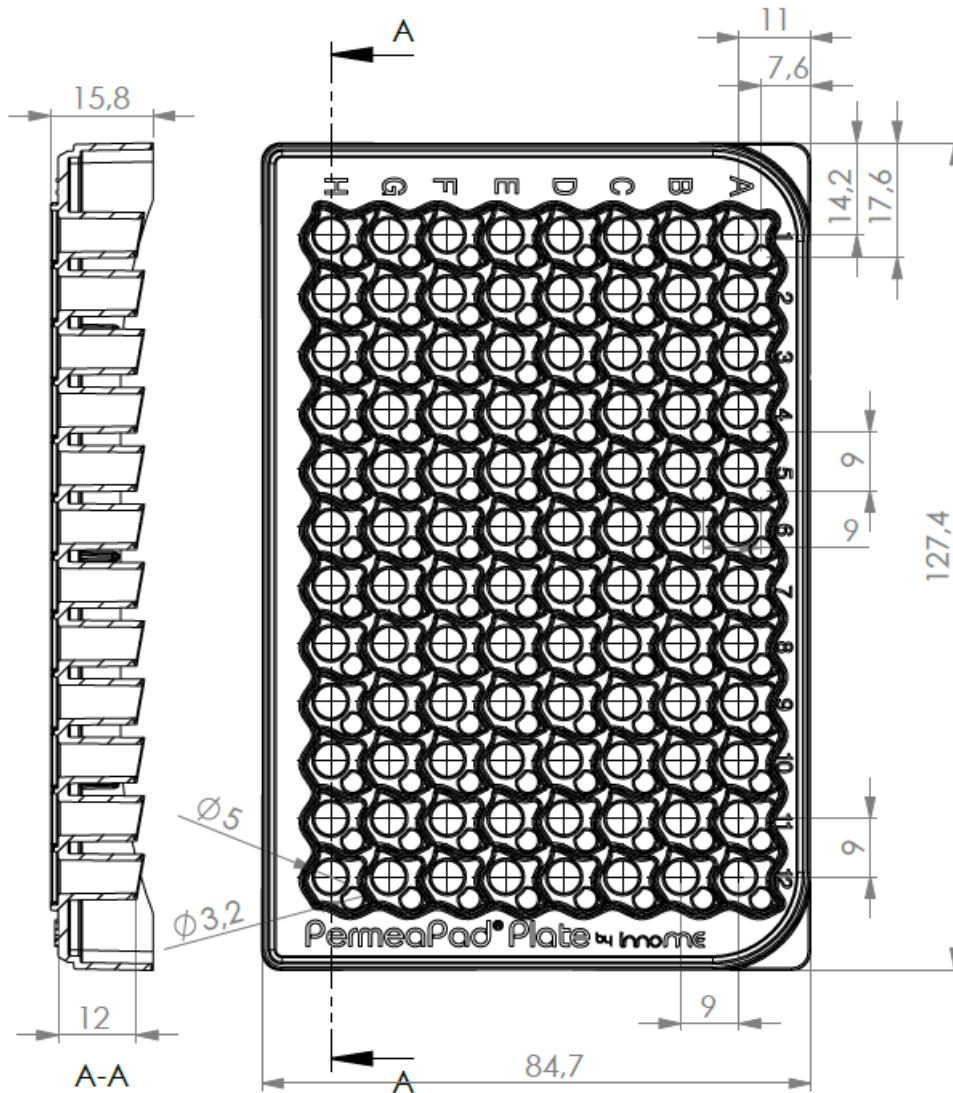


A-A





Measurements of the Insert-plate (mm):





Scope of delivery

PermeaPad® GIT Plate:

- 96-well bottom plate
- 96-well Insert-plate with integrated PermeaPad® Barrier
- Cover

Storage



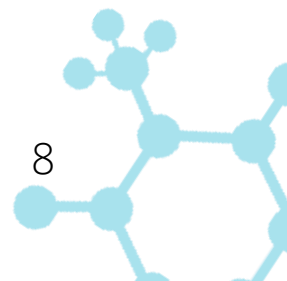
- dry and dark at 25°C
- protected from extreme temperatures
- protected from dust and sun



- in horizontal orientation
- store in the packaging until use

Please Note

If you store or transport the product improperly, the product may be damaged. Observe the information on handling (see User Guidelines) and storage of the product.

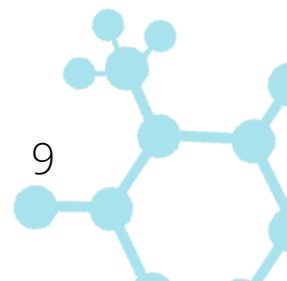




User Guidelines

Additional Application Details [1-4]:

- Valid experiments require separation between donor and acceptor compartments and the absence of leakage. Use packings if appropriate.
- The membrane (PermeaPad® GIT Barrier) should not be pierced or torn off, e.g. with a pipette tip.
- The PermeaPad® GIT Barrier is functionally stable in a wide pH range and in the presence of co-solvents, surfactants and biomimetic media:
 - The PermeaPad® GIT Barrier is stable in the pH range of 1-10.
 - The PermeaPad® GIT Barrier is compatible with pH-gradient permeation set-ups:
 - Example: Donor compartment (pH=1) to the acceptor compartment (pH_{start}=7.3, pH_{end}=7.0) after 5 hours of trial.
 - Published co-solvents:
 - Ethylalcohol (up to 40%)
 - DMSO (up to 20%)
 - PEG400 (up to 10%)
 - Published surfactants:
 - Brji 97 (up to 5%)
 - Macroglycerol Ricinoleate; Cremophor® EL (up to 5%)
 - Polysorbate 60 (up to 4%)
 - Polysorbate 80 (up to 5%)
 - Natriumdodecylsulfat (up to 5%)
 - Triton-X (up to 1%)
 - Published biomimetic media:
 - FaSSIF
 - FeSSIF
 - FaSSGF
 - Pancreatic extract





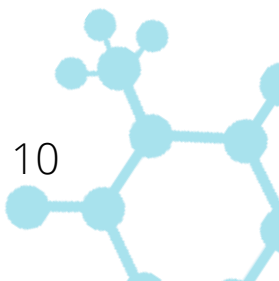
References

[1] M. di Cagno et al. (2015): New biomimetic GIT Barrier Permeapad™ for efficient investigation of passive permeability of drugs. European Journal of Pharmaceutical Sciences 73: 29-34

[2] H. A. Bibi et al. (2015): Permeapad™ for investigation of passive drug permeability: The effect of surfactants, co-solvents and simulated intestinal fluids (FaSSIF and FeSSIF). International Journal of Pharmaceutics 493: 192-197

[3] H. A. Bibi et al. (2016): Use of Permeapad® for prediction of buccal absorption: A comparison to in vitro, ex vivo and in vivo method. European Journal of Pharmaceutical Sciences 93: 399-404

[4] H. A. Bibi et al. (2017): Simultaneous lipolysis/permeation in vitro model, for the estimation of bioavailability of lipid based drug delivery systems. European Journal of Pharmaceutics and Biopharmaceutics 117: 300-307.





Version 3: Changes, including technical, reserved. 01.01.2023

In case of a defect, please contact info@phabioc.com.

www.phabioc.com

PHABIOC GmbH
Friederich-Weick-Str. 40
D-76189 Karlsruhe
Tel. +49 (5772) 560 500
info@phabioc.com
www.phabioc.com

