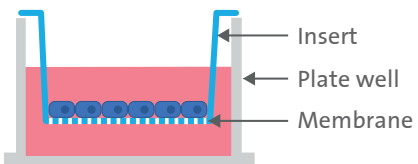
CORNING

Corning® BioCoat®, Falcon® and Transwell® Permeable Supports

5 Versatile Uses

1 Drug screening in complex cell types

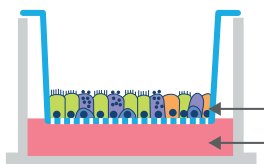
Permeable supports enable the formation of a tight cell layer at the top of the membrane, which allows assessment of transport, diffusion, secretion, permeability, and drug uptake of compounds added to the cells.



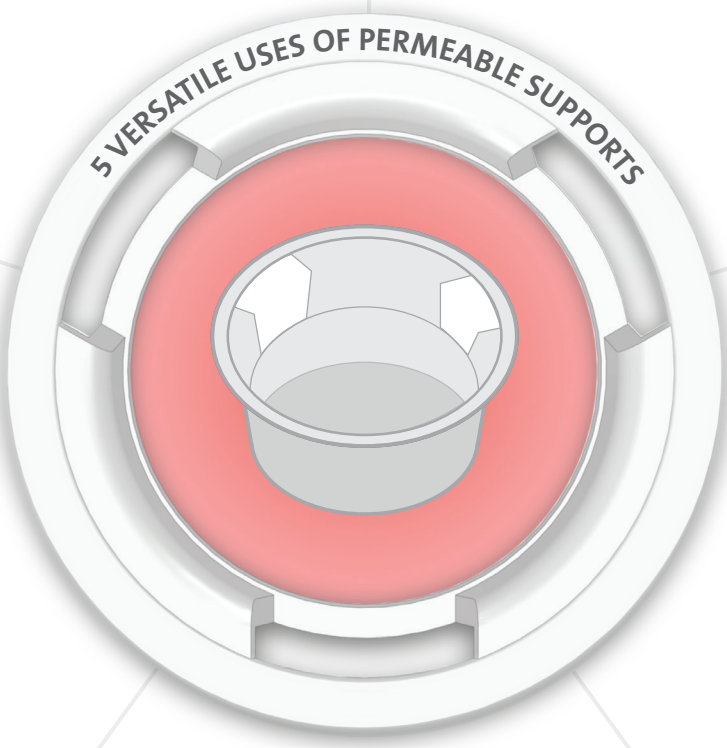
Examples
ADME/Tox screening (blood-brain barrier, intestinal epithelium).

2 Differentiation of specialized cells

Permeable supports allow cultures at the air-liquid interface: the apical side of the cells is exposed to air, while the basolateral side is immersed in liquid media. This mirrors the cells' natural environment and promotes their full differentiation.

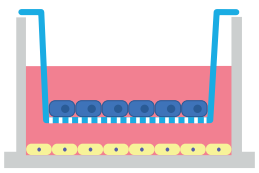


Examples
In vitro tissue modeling of epithelial cells (epidermis, airway epithelia, disease models, organoids).



3 2D, 3D, and complex co-culture studies

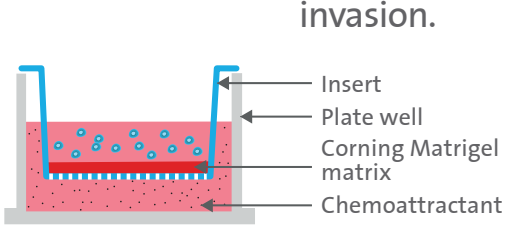
Permeable supports enable 2D, 3D, and co-culture of different cell types, allowing the exchange of secreted factors through membrane pores, without cell-to-cell contact.



Examples
2D, 3D cell culture, intracellular communication, or cell metabolism that influences other cell types (gene expression, secretion).

4 Invasion assays

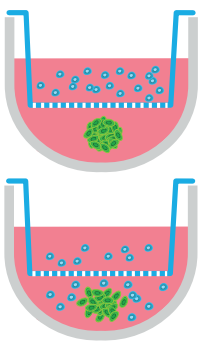
Permeable supports pre-coated with extracellular matrices serves as a barrier for non-invasive cells, while presenting an appropriate environment to study cell invasion.



Examples
Invasion capacity of normal/malignant or compound treated/non-treated cells towards a chemoattractant.

5 Chemotaxis and migration assays

Permeable supports enable the analysis of the cells' ability to migrate through the membrane pores towards a chemoattractant (e.g., a tumor spheroid) grown in a Corning spheroid plate.



Examples
Immune response, cancer metastasis.

Options for Customizing Your Individual Needs

Membrane Material	Pore Size	Growth Area	Pre-coated
PC or PET PC: High pore density PET: Clear (transparent, translucent), Corning FluoroBlok™ light blocking	0.4, 1.0, 3.0, 5.0, or 8.0 µm **Format** • Individual inserts • HTS inserts	• 100 mm dish • 6-, 12-, 24-, or 96-well plates • Large format (100 cm^2 growth area)	Lot-to-lot consistency, reproducible results for 2D and 3D cell cultures • Collagen • Fibronectin • Corning Matrigel® matrix

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