making a difference

3D MADE EASY

3D CELL CULTURE SOLUTIONS

For more representative results

Because biology lives in a
3-dimensional world.

greiner
BIO-ONE

ADVANTAGES

MIMICS IN VIVO PHYSIOLOGICAL CONDITIONS

by replicating native tissue microenvironment

IN VITRO WITH IN VIVO CELL-CELL INTERACTIONS

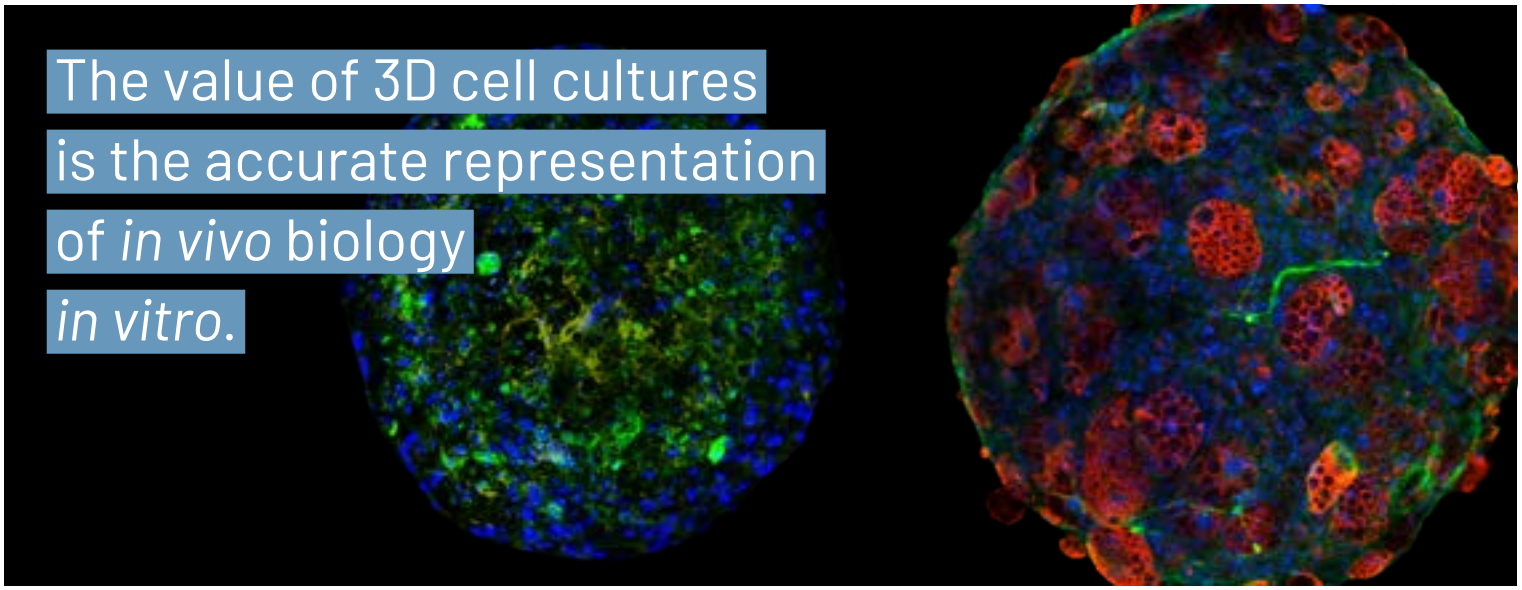
by promoting cell-cell contact and interaction with ECM for predictive drug response

CO-CULTURE OF SEVERAL CELL TYPES

and possibility of human cell usage

NO ETHICAL DIFFICULTIES

compared to animal usage - **R**eplacement, **R**eduction and **R**efinement (3Rs)



Open your mind to 3D cell culture. Go deeper - and find out what's really there

Not long ago, researchers were sceptical of the value of culturing cells in a 3D environment. Today, 3D cell culture has become a routine tool that plays a vital role in life sciences, especially in cancer research, drug discovery and toxicology. 3D cell culture approaches are still relatively new despite their early impact. There is still ambiguity in the robustness of culturing techniques, the readiness of the supply chain, and even the use of terminology depicting 3D morphology. The value of 3D cell cultures is defined by the increased dimensionality and access to contact between cells to generate a phenotype predictive of *in vivo* biology but performed *in vitro*.

Cell-cell interaction is fundamental, independent of whether 3D structures are called spheroids, organoids, assembloids, or tumoroids, and of course, a phenotype is agnostic to terminology.

Greiner Bio-One has three main product options available to perform 3D cell culture to give the best solution for every specific research question. **ThinCert® cell culture inserts** to mimic a variety of *in vivo* situations by the two-compartment system.

CELLSTAR® cell culture vessels with cell-repellent surfaces prevent cell adherence to promote the spontaneous formation of three-dimensional spheroids and as an essential accessory for the **magnetic 3D cell culture technology (m3D)**. M3D creates 3D cell culture structures by magnetizing cells and using magnet forces.

THE VALUE OF GREINER BIO-ONE'S 3D CELL CULTURE TECHNOLOGIES:

- **Easy to mimic - accurate representation of native tissue environment**
- **Easy to overcome drawbacks - leave behind disadvantages of 2D cell culture and animal experiments for more relevant cell models**
- **Easy to scale - scalable systems to increase the throughput**
- **Easy to setup - confirmed by independent scientific publications**

3D CELL CULTURE PRODUCT PORTFOLIO OVERVIEW

ThinCert® Portfolio

Format: available in different formats and pore sizes

Single Inserts

- 6, 12 and 24 Well Inserts
- 0.4 µm, 1.0 µm, 3.0 µm and 8.0 µm pore sizes

Deep Well Plates

- 6 and 12 Well Format
- Deep wells for increased volume of medium

96 Well HTS Insert

- For high-throughput assays
- 0.4 µm, 3.0 µm and 8.0 µm pore sizes

CELLSTAR® Cell-Repellent Vessels

Raw material: Polystyrene

Dishes

- 35, 60 and 100 mm diameter
- With vents

Flasks

- 50, 250, 550 and 650 ml version
- With screw or filter screw cap

Flat bottom plates

- 96, 384 and 1536 well version
- Clear, black and white with µclear bottom

U-bottom plates

- 96 and 384 well version
- Clear

Magnetic 3D Cell Culture Solutions

Format: available for different well formats

Bioprinting Kits

- 96, 384 and 1536 well

Bio-Assembler Kits

- 6 and 24 well

BioAssay Kits

- 96 and 384 well

MagPen Kits

- Single, 24 and 96 well Multi-MagPen

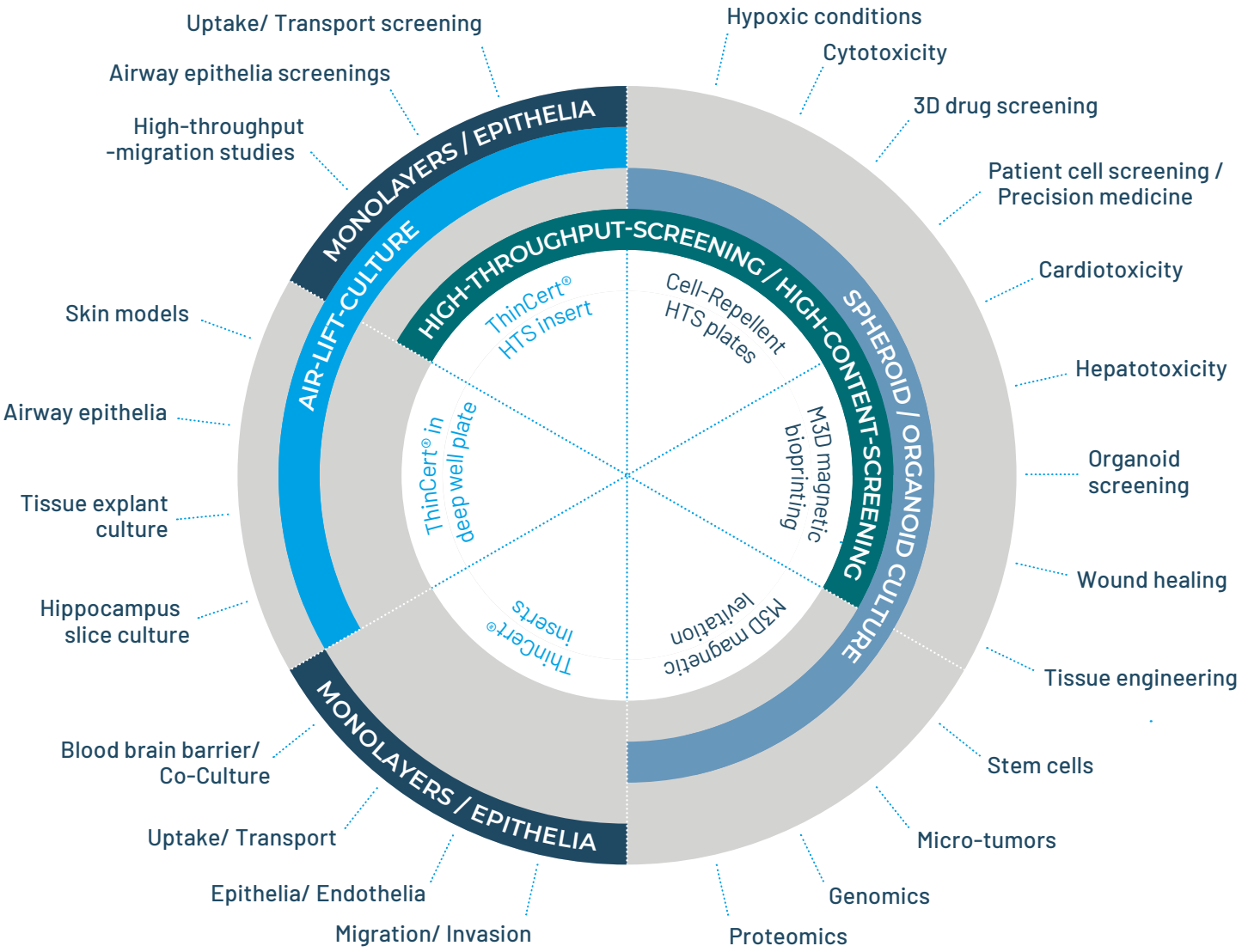
gbo.com/3d

Find this and further information on our website

MATCHING PRODUCTS FOR VARIOUS APPLICATION FIELDS

The application fields where 3D cell culture is essential can range from cell migration assays and tissue engineering to high-throughput drug discovery and toxicology research. Depending on the application need or scientific question, whether in basic research or industry, the right product needs to be selected, either low- or high-throughput.

Greiner Bio-One offers a wide range of solutions for all kind of 3D cell culture applications - let´s overcome limits together!



THINCERT®
CELL CULTURE PORTFOLIO

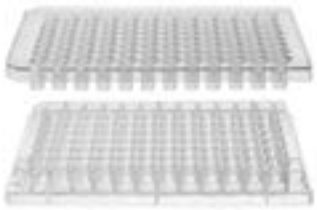
BROAD PRODUCT RANGE FOR MEMBRANE-BASED CELL CULTURE APPLICATIONS

For advanced cell and tissue culture applications, Greiner Bio-One offers an extensive portfolio of membrane supports - ThinCert®. Combining different membrane specifications (pore size and density) in geometries to fit 6, 12, 24 an 96 well plates, the ThinCert® cell culture inserts are suitable for a wide range of applications including transport, secretion and diffusion studies, migrational experiments, cytotoxicity testing, co-cultures, trans epithelial electric resistance (TEER) measurements and primary cell culture. ThinCert® cell culture inserts with porous membranes assembled to a clear housing form a two-compartment system to mimic a variety of in-vivo like cultivation conditions to facilitate optimal cell growth, monolayer formation, and tissue differentiation.

KEY FACTS

- **Porous membrane in different pore sizes**
- **Capillary pore membrane assembled onto insert**
- **Insert and well form a two-compartment system**
- **Compartments can communicate via membrane pores**
- **Improved cell adhesion through physical surface treatment**
- **Enhanced pipetting access and gas exchange**

ThinCert® Single Insert
6 Well



ThinCert® HTS Insert
96 Well

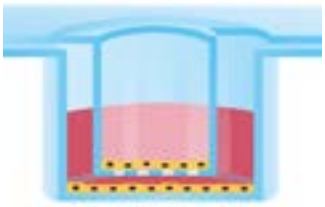
**Migration/
Invasion assay**

Cell migration and invasion are fundamental processes in numerous physiological and pathological events, such as morphogenesis, tissue repair, inflammation, and tumorigenesis. The availability of in-vitro assays to study cell migration is of great importance for a better understanding of the underlying biological mechanisms and for the development of therapeutic interventions. The filter assay is a standard in-vitro model utilising a two-compartment system in which cells are induced to migrate from an upper compartment through a porous membrane into a lower compartment, following the gradient of a chemoattractant.

HIGH-THROUGHPUT MADE EASY

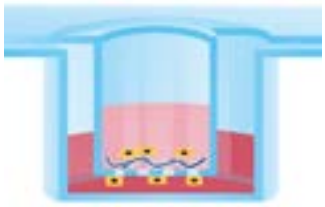
Beside the single insert solution the portfolio also includes an automation-friendly high-throughput version for cell-based membrane applications. Whether starting anew or transitioning from less effective options, you will benefit from clear research advantages including reliable performance, higher throughput, and significantly reduced assay expenses.

Greiner Bio-One offers several application protocols for the practical integration of ThinCert® cell culture inserts addressing a specific question and providing detailed laboratory instructions.



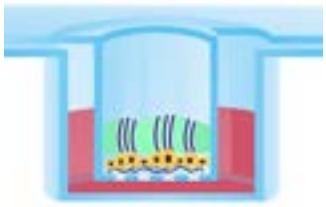
Co-Cultures

Co-culture studies involve the cultivation of two or more different types of cells or microorganisms in the same environment, allowing scientists to explore the dynamic interactions that occur between them. These studies provide insights into various biological processes, including cell signalling, proliferation, differentiation and the restoration of heterocellular functions (e.g., blood-brain barrier). ThinCert® offers a versatile platform for seeding cells in both the upper and lower compartments facilitating the exchange of molecules between these cell populations through its membrane.



Transport studies

Transport studies are vital for pharmaceutical research and toxicology, offering insights into drug permeability, barrier integrity, and transport mechanisms. These investigations, including ADME (Absorption, Distribution, Metabolism, and Excretion), are critical for understanding drug efficacy and safety. Specifically, drug transport studies focus on how drugs move across biological barriers like cell membranes or tissue layers, helping predict pharmacokinetic behaviour and optimise drug formulations.



Air-liquid interface cell culture

Air-liquid interface cell culture (ALI) offers the capability to create robust and fully functional 3D in-vitro human airway cell models, replicating the characteristics of respiratory tract epithelia. This is achieved by exposing the apical side of the cells to air, while they continue to receive essential nutrients and differentiation factors through a porous membrane from the culture medium. These advanced models empower researchers to delve into both physiological and pathological aspects of the respiratory tract.


Innovative chemical surface modification
effectively supports the formation
of spheroids.

CELLSTAR®
CELL-REPELLENT VESSELS

PREVENT CELL ATTACHMENT TO SUPPORT THE FORMATION OF 3D CELL CULTURES

In contrast to standard tissue culture surfaces optimized to enhance cell attachment conditions, the CELLSTAR® cell-repellent surface has been developed to prevent cell attachment effectively. For the formation of e.g. spheroids or self-assembled spherical clusters used as 3D cell culture models, the cell-cell interaction must dominate over the interaction between the cells and the culture surface of containment.

CELLSTAR® cell-repellent products are by default sterile, non-cytotoxic, free of detectable endotoxins, detectable DNase / RNase and human DNA and have a 4 year shelf-life.

APPLICATIONS

- **Suspension culture of semi-adherent and adherent cell lines**
- **Spheroid culture of a single spheroid per well in round-bottom, or multiple spheroids in flat-bottom microplates, flasks and dishes**
- **Aggregation of stem cells, as a key step for cultivation and differentiation in 3D**
- **3D culture in hydrogels without cell migration out of the hydrogel and formation of 2D subcultures**
- **Indispensable part of the magnetic 3D cell culture technology**

GO DEEPER!

Find detailed information in the related FORUM NO. 17 at our Download Center.

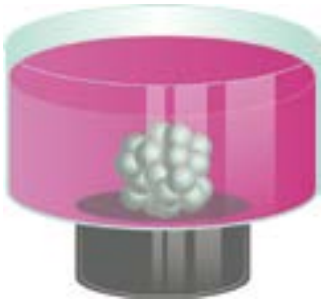
MAGNETIC 3D CELL CULTURE SOLUTIONS

BECAUSE 3D MUST NOT BE COMPLICATED

The core technology of Greiner Bio-One's Magnetic 3D Cell Culture is the magnetisation of cells with NanoShuttle-PL. The magnetised cells can be aggregated by magnetic forces, either by levitation or bioprinting, to form microphysiologically relevant 3D models *in vitro*. The magnetic system overcomes the limitations of other platforms by enabling the manipulation of cells for the rapid formation of spheroids, reproducible and scalable in size for high-throughput, without restrictions of cell type. When used in tandem with commercially available standardised biochemical assay methods, the magnetic 3D cell culture method facilitates continuous assessment of cell viability and other functions to provide an ideal platform for e.g. compound or viability screenings or genomics or protein analysis.

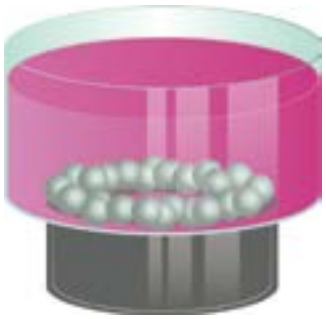
Levitation
6 and 24 well

By levitating cells from the bottom of a cell-repellent plate, magnetic forces work as an invisible scaffold to gently and rapidly aggregate cells, forming larger spheroids at the air-liquid interface, induce cell-cell interactions and initiate ECM synthesis.



Bioprinting
96, 384 and 1536 well

With bioprinting magnetised cells are printed into spheroids by placing a cell-repellent plate atop a drive of magnets, where a single magnet below each well utilises mild magnetic forces to induce aggregation and print one spheroid at the bottom of each well within 15 minutes to a few hours.



Bio Assay
96 and 384 well

In addition bioprinting with a spheroidal shape, magnetic printing of cells can also be patterned into a ring formation. For up to 72 hours immediately following bioprinting, the patterned structures will shrink/close as a function of cell migration, viability, cell-cell interaction, and/or proliferation.

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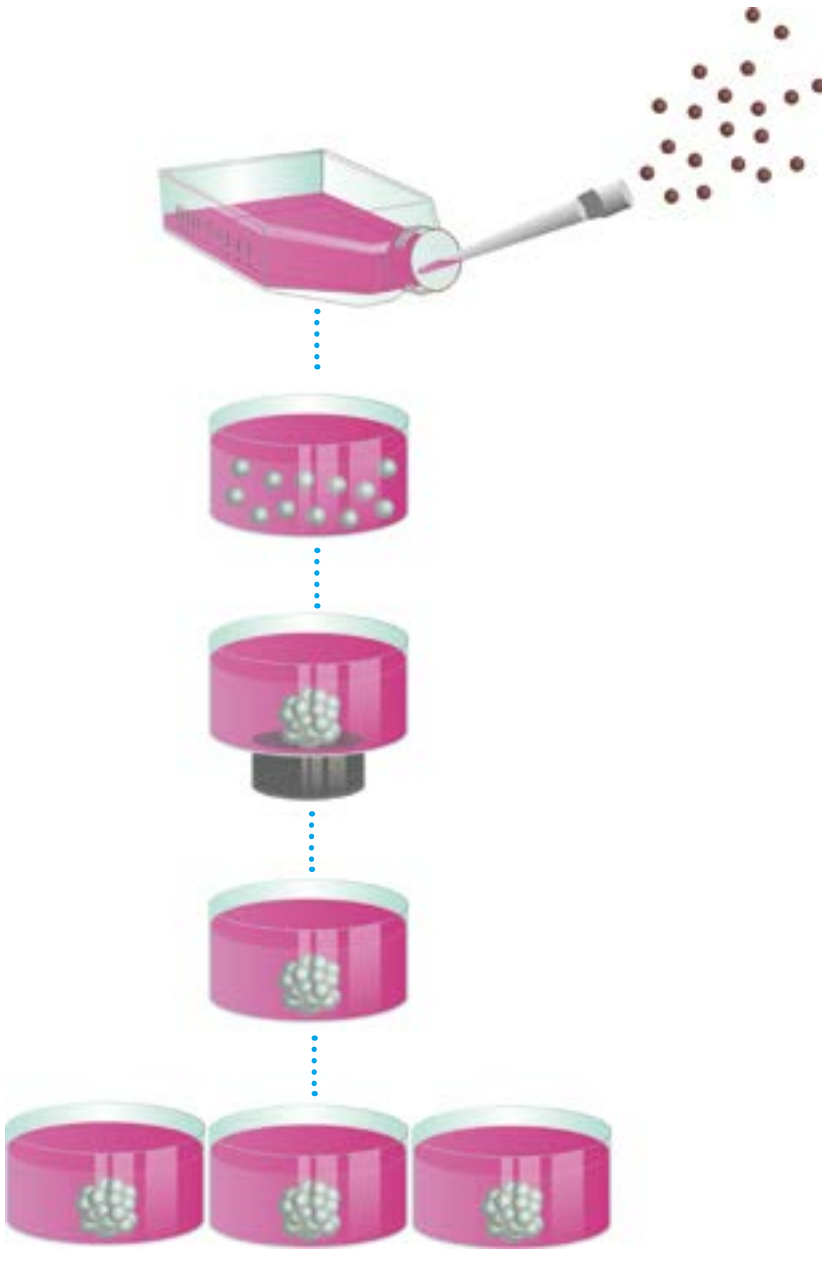
Find this and further information on our website

3D CELL CULTURE FORMATION IN A FAST AND EASY WORKFLOW!

1. Incubate cells with NanoShuttle-PL
2. Detach, count and dispense magnetised cells in a cell-repellent plate
3. Induce cell aggregation with a magnet plate
4. Remove plate from magnet after > 15 min
5. Spheroid growth and downstream experiments e.g. Protein analysis and drug screening



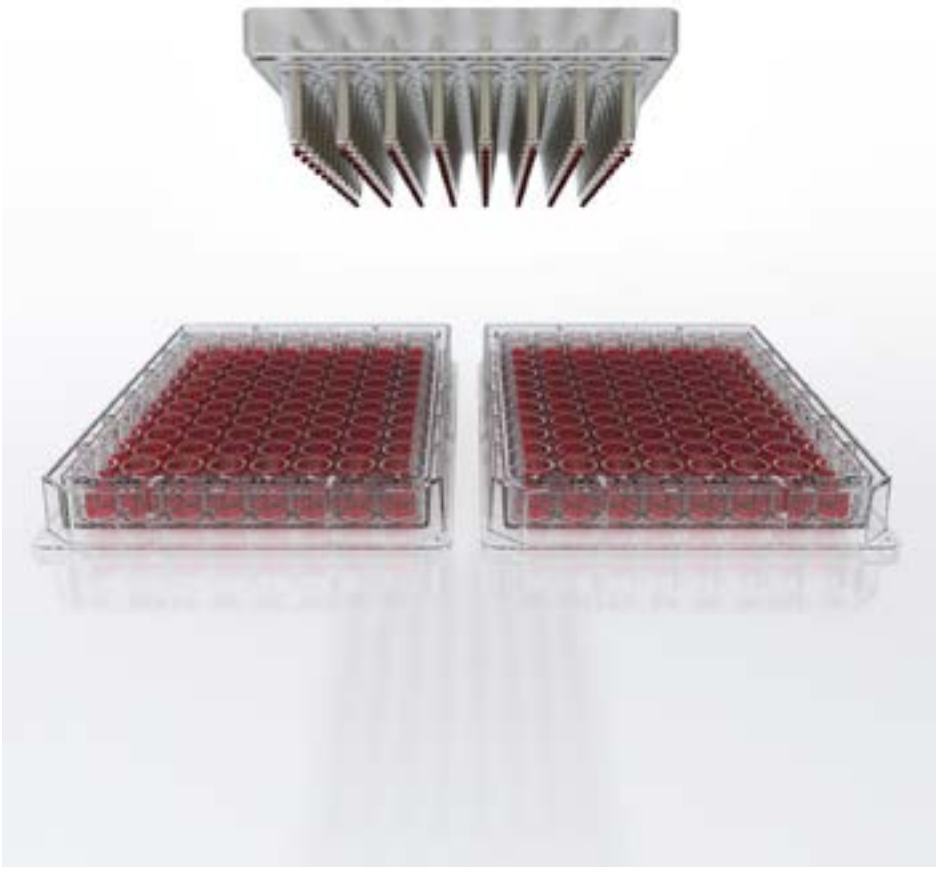
MAGPEN - YOUR SMART ASSISTANT FOR 3D CELL CULTURE TRANSFER

The MagPen facilitates easy and fast transfer and collection of magnetised cell cultures without disrupting their microtissue architecture. Cells, magnetised and cultured by Magnetic 3D Cell Culture (M3D), can be transposed by a simple "pick up-and-drop"-step.

Additionally to that, the MagPen can be used to create and organize co-cultures by combining different magnetised 3D cell cultures.

The MagPen is availible as single version and as Multi-MagPen in 24 and 96 well format for simultaneous transfer of various cell cultures in one step.

Have a closer look to our video animations of our magnetic 3D cell culture solutions



MAGPEN - THE PRINCIPLE

- Fast, easy and simultaneous transfer of multiple 3D cell cultures without pipetting
- Complete media change by a simple "pick up-and-drop"- step
- Simplified co-culturing of different cell types
- Ideal for easy immunohistochemistry staining, blocking, and washing of spheroids

MAGNETISATION WITH NANOSHUTTLE-PL

NanoShuttle-PL is a nanoparticle assembly (~50 nm) consisting of biocompatible components: gold, iron oxide, and Poly-L-Lysine (PLL). Although NanoShuttle-PL is not itself an FDA-approved product for use in humans, the constituent components are themselves biocompatible.

The cells are magnetised by electrostatically attaching small amounts of NanoShuttle-PL non-specifically to cell membranes via PLL at a concentration of around 50 pg/cell. Magnetised cells will appear peppered with dark nanoparticles after incubation, giving a speckled appearance. A small magnetic force of 30 pN/cell is enough to levitate and assemble cells without causing any harm.

NANOSHUTTLE-PL - THE BIOCOMPATIBILITY

- **Will not affect proliferation, viability, metabolism, inflammatory or oxidative stress, phenotype and/ or other cell functions**
- **Does not bind any specific receptors, works with all cell types**
- **Will release from the cell over 7-8 days into the surrounding extracellular matrix**
- **Does not cause any chromosomal abnormalities in cells and does not lead to genomic instability**

GO DEEPER!

Find detailed information in the related Whitepaper.

PRODUCT OVERVIEW
THINCERT® PORTFOLIO

ThinCert® Cell Culture Inserts
6 Well

Feature: 4 multiwell plates / box, Height: 16.25 mm, Ø internal: 24.85 mm, Ø external: 27.85 mm, Cultural surface: 452.4 mm², Surface treatment: TC, Working volume (ThinCert®): 1 ml - 3.6 ml, Working volume (well): 2 ml - 4.15 ml

Item no.	Pore density	Ø pore	Optical membrane properties	Sterile	Qty. inner / outer
657640	1 x 10^8 cm^2	0.4 µm	translucent	+	1 / 24
657641	2 x 10^6 cm^2	0.4 µm	clear	+	1 / 24
657610	2 x 10^6 cm^2	1 µm	clear	+	1 / 24
657630	0,6 x 10^6 cm^2	3 µm	clear	+	1 / 24
657631	2 x 10^6 cm^2	3 µm	translucent	+	1 / 24
657638	0,15 x 10^6 cm^2	8 µm	translucent	+	1 / 24

ThinCert® Cell Culture Inserts
12 Well

Feature: 4 multiwell plates / box, Height: 16.25 mm, Ø internal: 13.85 mm, Ø external: 15.85 mm, Cultural surface: 113.1 mm², Surface treatment: TC, Working volume (ThinCert®): 0.3 ml - 1 ml, Working volume (well): 1 ml - 2 ml

Item no.	Pore density	Ø pore	Optical membrane properties	Sterile	Qty. inner / outer
665640	1 x 10^8 cm^2	0.4 µm	translucent	+	1 / 48
665641	2 x 10^6 cm^2	0.4 µm	clear	+	1 / 48
665610	2 x 10^6 cm^2	1 µm	clear	+	1 / 48
665630	0,6 x 10^6 cm^2	3 µm	clear	+	1 / 48
665631	2 x 10^6 cm^2	3 µm	translucent	+	1 / 48
665638	0,15 x 10^6 cm^2	8 µm	translucent	+	1 / 48

ThinCert® Cell Culture Inserts
24 Well

Feature: 2 multiwell plates / box, Height: 16.25 mm, Ø internal: 8.4 mm, Ø external: 10.4 mm, Cultural surface: 33.6 mm², Surface treatment: TC, Working volume (ThinCert®): 0.1 ml - 0.35 ml, Working volume (well): 0.4 ml - 1.2 ml

Item no.	Pore density	Ø pore	Optical membrane properties	Sterile	Qty. inner / outer
662640	1 x 10^8 cm^2	0.4 µm	translucent	+	1 / 48
662641	2 x 10^6 cm^2	0.4 µm	clear	+	1 / 48
662610	2 x 10^6 cm^2	1 µm	clear	+	1 / 48
662630	0,6 x 10^6 cm^2	3 µm	clear	+	1 / 48
662631	2 x 10^6 cm^2	3 µm	translucent	+	1 / 48
662638	0,15 x 10^6 cm^2	8 µm	translucent	+	1 / 48

ThinCert® Plate 6 / 12 Well

Height: 39.5 mm, Length: 129.5 mm, Width: 86.6 mm, Lid: yes, condensation rings

Item no.	Well format	Working volume (well)	Sterile	Qty. inner / outer
657110	6	≤20 ml	+	1 / 50
665110	12	≤4 ml	+	1 / 60

ThinCert® 96 Well HTS Insert (Membrane plates and receiver plates)

Growth area: 14 mm^2, Working volume (well of membrane plate): 15 - 160 µl,
Working volume (well of receiver plate): 120 - 300 µl, Lid: yes, condensation rings

Item no.	Pore density	Ø Pores	Optical features of membrane	Surface treatment	Sterile	Qty. inner / outer
655640	1 x $10^8/cm^2$	0.4 µm	translucent	TC	+	1 / 5
655641	2 x $10^7/cm^2$	0.4 µm	**optimised transparency**	TC	+	1 / 5
655630	2 x $10^6/cm^2$	3 µm	transparent	TC	+	1 / 5
655680	1 x $10^5/cm^2$	8 µm	transparent	TC	+	1 / 5

Receiver plates for ThinCert® 96 Well HTS Insert

Working volume (well of receiver plate): 120 - 300 µl, Lid: yes, condensation rings

Item no.	Growth area	Surface treatment	Sterile	Qty. inner / outer
655169	-	non-treated	+	8 / 32
655167	53 mm^2	TC	+	8 / 32

PRODUCT OVERVIEW
CELLSTAR® CELL-REPELLENT VESSELS

Cell Culture Dishes
Cell-Repellent Surface

Raw material: PS, Surface treatment: cell-repellent, Vent nock: yes

Item no.	Height	Ø nominal size	Working volume	Total volume	Sterile	Qty. inner / outer
627979	10 mm	35 mm	≤3 ml	10 ml	+	10 / 40
628979	15 mm	60 mm	6 ml - 7 ml	28 ml	+	10 / 20
664970	20 mm	100 mm	16 ml - 17 ml	100 ml	+	1 / 5

Cell Culture Flasks
Cell-Repellent Surface

Raw material: PS, Surface treatment: cell-repellent

Item no.	Flask design	Cap colour	Total volume	Cap design	Sterile	Qty. inner / outer
690985	flat	white	50 ml	filter screw cap	+	10 / 20
658985	flat	white	250 ml	filter screw cap	+	5 / 15
660985	flat	white	550 ml	filter screw cap	+	5 / 5

Multiwell Plates / Microplates
Cell-Repellent Surface

Raw material: PS, Surface treatment: cell-repellent

Item no.	Well format	Well profile	Bottom	Product colour	Total volume (well)	Working volume (well)	Lid	Sterile	Qty. inner / outer
657970	6	F-bottom	solid	clear	16.1 ml	2 ml - 5 ml	yes, condensation rings	+	1 / 5
665970	12	F-bottom	solid	clear	6.5 ml	2 ml - 4 ml	yes, condensation rings	+	1 / 5
662970	24	F-bottom	solid	clear	3.3 ml	0.5 ml - 1.5 ml	yes, condensation rings	+	1 / 5
677970	48	F-bottom	solid	clear	1.7 ml	0.5 ml - 1 ml	yes, condensation rings	+	1 / 5
650970	96	U-bottom	solid	clear	323 µl	40 µl - 280 µl	yes, condensation rings	+	1 / 6
650979	96	U-bottom	solid	clear	323 µl	40 µl - 280 µl	yes, condensation rings	+	8 / 32
651970	96	V-bottom	solid	clear	234 µl	40 µl - 200 µl	yes, condensation rings	+	1 / 6
655970	96	F-bottom / Chimney Well	solid	clear	392 µl	25 µl - 340 µl	yes, condensation rings	+	1 / 6
655976	96	F-bottom / Chimney Well	µClear®	black	392 µl	25 µl - 340 µl	yes, condensation rings	+	8 / 32
655976-SIN	96	F-bottom / Chimney Well	µClear®	black	392 µl	25 µl - 340 µl	yes, condensation rings	+	1 / 32
781970	384	F-bottom	solid	clear	131 µl	15 µl - 110 µl	yes	+	1 / 60
781974	384	F-bottom	µClear®	white	131 µl	15 µl - 110 µl	yes	+	8 / 32
781976	384	F-bottom	µClear®	black	131 µl	15 µl - 110 µl	yes	+	8 / 32
781976-SIN	384	F-bottom	µClear®	black	131 µl	15 µl - 110 µl	yes	+	1 / 32
787979	384	U-bottom	solid	clear	122 µl	10 µl - 90 µl	yes	+	8 / 32

PRODUCT OVERVIEW
MAGNETIC 3D CELL CULTURE

Spheroid Bioprinting
96 Well

Item no.	Description	Content kit	Qty. inner / outer
655840	96 Well Bioprinting Kit, clear	NanoShuttle-PL (3 vials), Spheroid Drive, Holding Drive, 96 well cell culture microplates (clear) with cell-repellent surface (2 x 655970)	1 / 1
655841	96 Well Bioprinting Kit, black, µClear®	NanoShuttle-PL (3 vials), Spheroid Drive, Holding Drive, 96 well cell culture microplates (black, µclear®) with cell-repellent surface (2 x 655976-SIN)	1 / 1
655850	96 Well Ring Drive	96 Well Ring Drive for the formation of 3D ring structures	1 / 1
655830	96 Well Spheroid and Holding Drive	Spheroid Drive, Holding Drive	- /1

Spheroid Bioprinting
384 Well

Item no.	Description	Content kit	Qty. inner / outer
781840	384 Well Bioprinting Kit, clear	NanoShuttle-PL (2 vials), Spheroid Drive, Holding Drive, 384 well cell culture microplates (clear) with cell-repellent surface (2 x 781970)	1 / 1
781841	384 Well Bioprinting Kit, black, µClear®	NanoShuttle-PL (2 vials), Spheroid Drive, Holding Drive, 384 well cell culture microplates (black, µClear®) with cell-repellent surface (2x 781976-SIN)	1 / 1
781850	384 Well Ring Drive	384 Well Ring Drive for the formation of 3D ring structures	1 / 1
781830	384 well spheroid and holding drive	Spheroid Drive, Holding Drive	- /1

Magnetic Levitation
6 / 24 Well

Item no.	Description	Content kit	Sterile	Qty. inner / outer
657840	6 Well Bio-Assembler Kit	Levitation Drive, Holding Drive, NanoShuttle-PL (2 Vials), 6 well cell culture multiwell plates (2 x 657970) and 6 Well Intermediate lid (2 x 657825) with cell-repellent surface		1 / 1
657825	6 Well Intermediate lid	Intermediate lid with cell-repellent surface	+	2 / 10
657830	6 Well Levitation and Holding Drive	Levitation Drive (1), Holding Drive (1)		- /1
662840	24 Well Bio-Assembler Kit	Levitation Drive, Holding Drive, NanoShuttle-PL (2 Vials), 24 well cell culture multiwell plates (2 x 662970) and 24 Well Intermediate lid (2 x 662825) with cell-repellent surface		1 / 1
662825	24 Well Intermediate lid	Intermediate lid with cell-repellent surface	+	1 / 10
662830	24 well Levitation and Holding Drive	Levitation Drive (1), Holding Drive (1)		- /1

Screening
96 / 384 Well

Item no.	Description	Content kit	Qty. inner / outer
655846	96 Well BiO Assay Kit	NanoShuttle-PL (3 vials), 6 Well Levitation Drive, 6 Well Intermediate Lid (2 x 657825) with cell-repellent surface, 96 Well Spheroid, Holding and Ring Drive, 96 Well Deep Well Plate, 6 Well cell culture multiwell plates with cell-repellent surface (2 x 657970), 96 Well cell culture microplates (clear) with cell-repellent surface (2 x 655970)	1 / 1
781846	384 Well BiO Assay Kit	NanoShuttle-PL (2 vials), 6 Well Levitation Drive, 6 Well Intermediate Lid (2 x 657825) with cell-repellent surface, 384 Well Spheroid and Holding Drive, 96 Well Deep Well plate, 6 Well cell culture multiwell plates with cell-repellent surface (2 x 657970), 384 Well cell culture microplates (clear) with cell-repellent surface (2 x 781970)	1 / 1

MagPen
Single / 24 Well / 96 Well

Item no.	Description	Content kit	Sterile	Qty. inner / outer
657850	MagPen 3-pack	Teflon caps (3), magnets (3)		- /3
657824	24 Well Multi-MagPen Kit	24 Well Multi-MagPen Drive and 24 Well Multi-MagPen Sleeve (2 x 651524) with cell-repellent surface		- /1
651524	24 Well Multi-MagPen Sleeve	Multi-MagPen Sleeve with cell-repellent surface	+	1 / 10
657896	96 Well Multi-MagPen Kit	96 Well Multi-MagPen Drive und 96 Well Multi-MagPen Sleeve (2 x 61596) with cell-repellent surface		- /1
651596	96 Well Multi-MagPen Sleeve	Multi-MagPen Sleeve with cell-repellent surface	+	1 / 10

Consumables / Accessories
Magnetic 3D Cell Culture

Item no.	Description	Content kit	Qty. inner / outer
657841	NanoShuttle-PL	600 µl vials of NanoShuttle-PL (1)	- /1
657843	NanoShuttle-PL 3-pack	600 µl vials of NanoShuttle-PL (3)	- /3
657846	NanoShuttle-PL 6-pack	600 µl vials of NanoShuttle-PL (6)	- /6
657852	NanoShuttle-PL 12-pack	600 µl vials of NanoShuttle-PL (12)	- /12

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