

# SPHERICALPLATE 5D<sup>®</sup>

## 3D cell culture rEvolution<sup>®</sup>

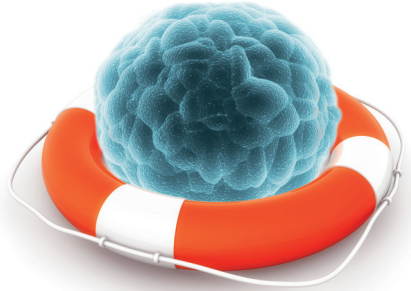


750 cell clusters  
with one move -  
**9000 per plate**

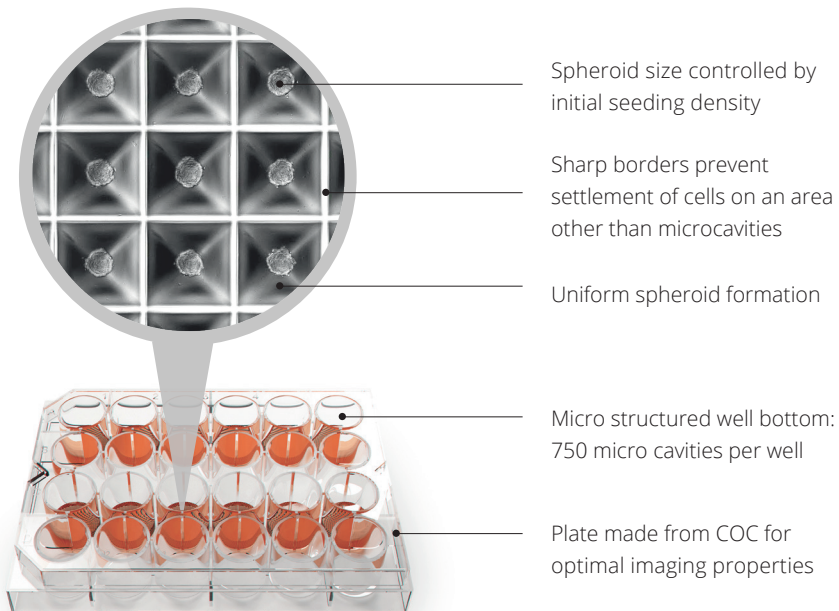
- 
- Physiological and easy spheroid formation by optimized niche geometry and surface
  - Convenient upscaling without loss of spheroid quality
  - Ability to translate into diagnostic or clinical use

## ► Safety First

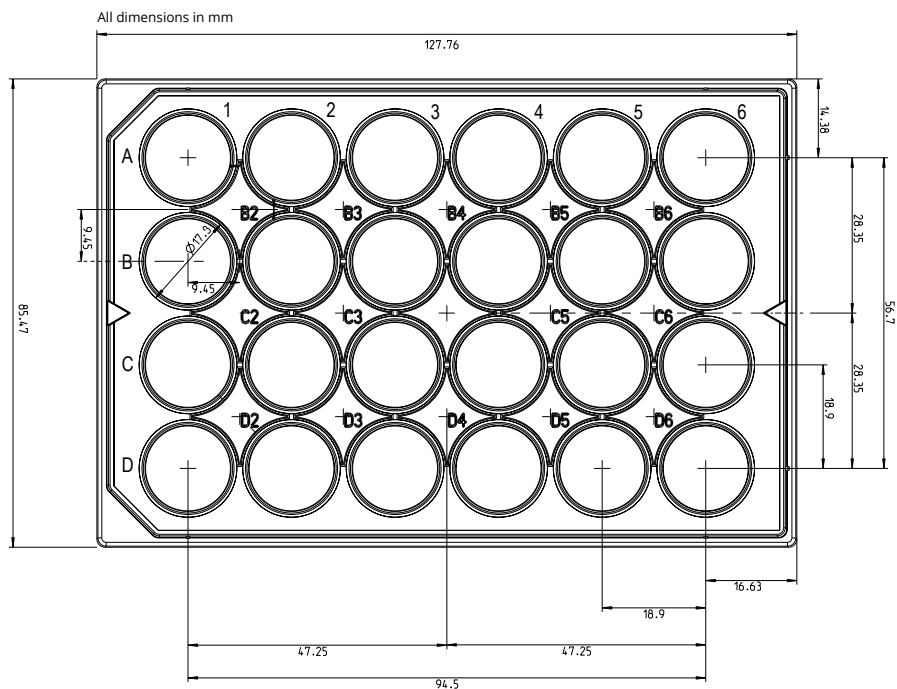
„Safety First“ is the principle of the new culture platform Sphericalplate 5D. Right from the start, this new plate enables effortless upscaling of your cell spheroids without losing control over cell differentiation and spheroid size. Medium change in your culture is rather simple with this plate and can be automated as well.



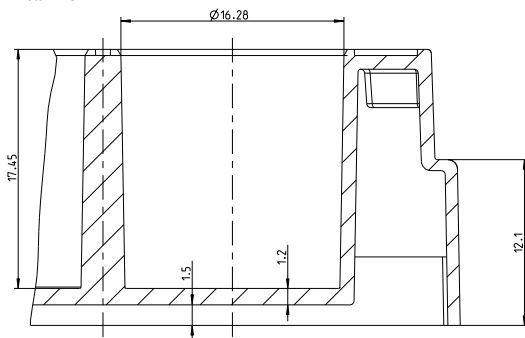
Therefore the Sphericalplate 5D supports the generation of large quantities of highly defined spheroids, enabling broad applicability for diagnostic or clinical use. The safety profile of the Sphericalplate 5D reduces the risk of unintended tumorigenesis to a minimum which is a prerequisite for all translational approaches.



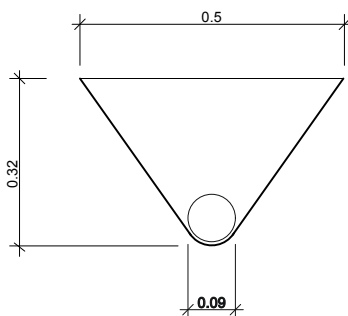
## ► Technical Description



Detail Well



Detail Microwell



Properties	<ul style="list-style-type: none"> <li>- Physiological Mechanobiology and Safety</li> <li>- Clinical Grade Nanocoating (ISO 11137)</li> <li>- Free from detectable cytotoxic substances according to ISO 10993-5</li> </ul>
Plate material	clear and transparent cyclic olefin copolymer (COC)
Surface	proprietary nano coating in wells A1-A6 and C1-C6
Lid material	clear and transparent polystyrene (PS)
Sterility (irradiation)	sterile according to ISO 11137 guaranteed sterility assurance level (SAL) $10^{-6}$

Number of Microwells		Volumes / well	
Per well	<b>750</b>	Theoretical max. volume	<b>3.0 ml</b>
Per plate	<b>9000</b>	Working volume	<b>0.5-2.0 ml</b>

**For the generation of:** 3D cell cultivation / Embryoid bodies / hiPSC / Tumor spheroids

## ► Cells Successfully Cultivated in the Sphericalplate 5D

human embryonic stem cells	human breast cancer cell line (MCF-7)
mouse embryonic stem cell line (HM-1)	human A549 cell line from lung carcinoma
human bone marrow-derived mesenchymal stromal cells	mouse 3T3 fibroblast cell line
human adipose-derived mesenchymal stromal cells	human umbilical vein endothelial cell line (huVEC)
human islet cells	human liver carcinoma cell line (HepG2)
rat islet cells	human pluripotent stem cell line (Hs181)
mouse islet cells	human osteosarcoma cell line (Saos-2)
human glioblastoma cell line	human caucasian fetal lung cell line (WI 38)
human prostate cancer cell line	human amniotic epithelial cells (hAEC)
human adrenal gland cancer cell line	

## ► Sphericalplate 5D Testimonials

«This plate is a game changer. Everyone who needs a lot of clusters needs this plate!»

**Prof. Dr. Dr. Maximilian Y. Emmert** – Institute for Regenerative Medicine, IREM, University of Zurich

«This plate will be our future standard for cell cluster production. You can do things with it which you just cannot do with other platforms.»

**Prof. Dr. Michael Raghunath** – Life Sciences, ZHAW Wädenswil

«We found perfect clustering in CD34 positive hematopoietic stem cells.»

**Dr. med. Dr. phil. nat. Mathias Hauri-Hohl** – Head of research stem cell transplantation, Kinderspital Zurich

«The Sphericalplate 5D is working wonderfully with my human prostate cancer cell line.»

**Dr. Lissette A. Cruz** – Postdoctoral Research Fellow, Department of Diagnostic and Biomedical Sciences, University of Texas Health Science Center at Houston USA

## ▶ Commercial Benefits



400x Space Savings\*

from factor 80 to 400



60x Time Savings\*

minimum 60 times versus multi-channel repeater



90x Cost Reduction\*

41 to 150 times compared to other platforms, labour saving not included!

\* when compared to classical hanging drop cultures or single spheroid formation per well.

## ▶ Order Information

Specification	Pack of
Sphericalplate 5D 24-well cell culture with Microwells (12)	1 Plate
Sphericalplate 5D 24-well cell culture with Microwells (12)	5 Plates
Sphericalplate 5D 24-well cell culture with Microwells (12)	10+1 Plates

Kugelmeiers Ltd.  
[www.kugelmeiers.com](http://www.kugelmeiers.com)

Bahnhofstrasse 40  
CH-8703 Erlenbach



(주)지비에스시스템즈  
[www.gbskr.com](http://www.gbskr.com)

[gmbioscience@hanmail.net](mailto:gmbioscience@hanmail.net)  
Tel : 02)2243-9090



For research use only. Not for clinical diagnostic or therapeutic use. Technical changes, all errors and misprints excepted.  
Sphericalplate 5D ® and Kugelmeiers ® as well as the mentioned text and logos are the trademarks of Kugelmeiers Ltd.