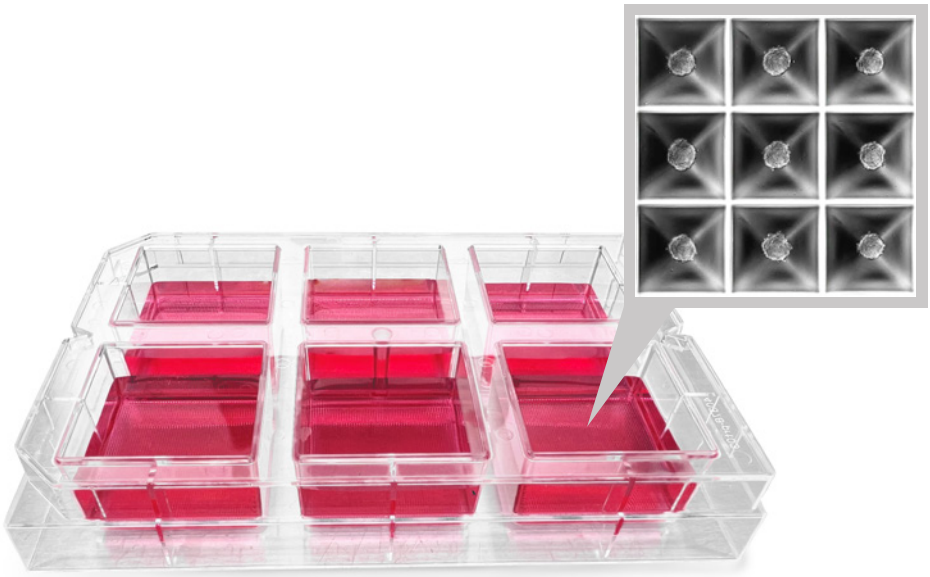
SPHERICALPLATE 5D®

Ecosystem for Regenerative Medicine



Cancer Research

« 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

The Benefits

- uniformity - standardization of spheroid formation
- no surface attachment due to pre-applied coating
- scalability - production of high quantities of spheroids to do high throughput imaging/screening/analysis (e.g. Omics > Proteomics/Genomics/Metabolomics)
- suitable for personalized diagnosis or individualized investigations of patient derived cells
- easy application for testing different compounds on many spheroids within wells on the same plate
- compatibility with standard, existing imaging, and automatization technologies/ equipment/systems > especially centralized position of spheroid within microwell
- Long and short time culture possible to generate sufficient spheroids
- collection of secretome from the cancer spheroids possible

Example of cancer cells successfully cultivated in SP5D

- human (A549) lung cancer cell line
- human (HepG2) liver cancer cell line
- human (Saos-2) osteosarcoma cell line
- human (LNCaP) prostate cancer cell line

Literature:

1. Lisa-Marie Philipp, Pirsch Matthias, *et al.*, Synentec Application Note **https://www.sp5d.com/cm/wp-content/uploads/SYNENTEC-kugelmeiers_sphericalplate_5d_FINAL.pdf**
2. Nishant S.Kulkarni, Vivek Gupta, *et al.*, Materials Science and Engineering Journal, 2021. **https://doi.org/10.1016/j.msec.2021.111891**
3. Laura Schreyer, Susanne Muehlich, *et al.*, Cancers Journal, 2021. **https://doi.org/10.3390/cancers13215373**
4. Tristen V. Tellman, Mary C. Farach-Carson, *et al.*, International Journal of Molecular Sciences, 2021. **https://doi.org/10.3390/ijms22063218**

> Further information: **www.sp5d.com**

Kugelmeiers Ltd.
www.kugelmeiers.com

Bahnhofstrasse 40
CH-8703 Erlenbach

KUGELMEIERS®
ECOSYSTEM FOR REGENERATIVE MEDICINE