

SPHERICALPLATE 5D®

Ecosystem for Regenerative Medicine



► Cancer Research



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

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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.*, Syntec Application Note  https://www.sp5d.com/cm/wp-content/uploads/SYNTREC-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