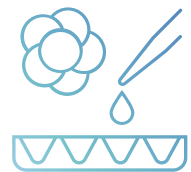


SPHERICALPLATE 5D®

Ecosystem for Regenerative Medicine



► Islet Research



« With the help of the Sphericalplate 5D from Kugelmeiers, we were able to produce standardized and scalable Pseudo-Islets with uniform morphology from different species. »

U. Schubert- AG Prof. Dr. B. Ludwig

Department of Medicine III, Faculty of Medicine,
University Hospital Dresden



The Benefits

- uniformity - standardization of islet spheroid size
 - scalability - production of high quantities of islet spheroids (9'000 spheroids/ plate)
 - maintain viability of islet spheroids
 - preserve functionality of islet spheroids
 - compatibility with standard, existing imaging, and automatization technologies/ equipment/systems > especially centralized position of spheroid within microwell
-

Example of islet cells successfully cultivated in SP5D

- Primary islet cells (human, pig, rodents)
 - Beta cell lines (EndoC- β H1, MIN-6)
-

Literature:

1. Charles-Henri Wassmer, Ekaterine Berishvili, *et al.*, Cell Transplantation Journal, 2020. [🌐 https://doi.org/10.1177/0963689720937292](https://doi.org/10.1177/0963689720937292)
 2. Undine Schubert, Barbara Ludwig, *et al.*, IPITA Congress Abstract, 2021. [🌐 https://journals.lww.com/transplantjournal/Fulltext/2021/12001/402_8_Neonatal_porcine_Pseudo_Islets__A.48.aspx](https://journals.lww.com/transplantjournal/Fulltext/2021/12001/402_8_Neonatal_porcine_Pseudo_Islets__A.48.aspx)
 3. Stefan Bornstein, Constanze Hantel, *et al.*, Cell Death & Disease Journal, 2022. [🌐 https://www.nature.com/articles/s41419-022-05096-x](https://www.nature.com/articles/s41419-022-05096-x)
 4. Honarpisheh M, Seissler J, *et al.*, Transpl Int. Journal, 2022. [🌐 https://www.frontierspartnerships.org/articles/10.3389/ti.2022.10697/full](https://www.frontierspartnerships.org/articles/10.3389/ti.2022.10697/full)
- > Further information: [🌐 www.sp5d.com](http://www.sp5d.com)
-