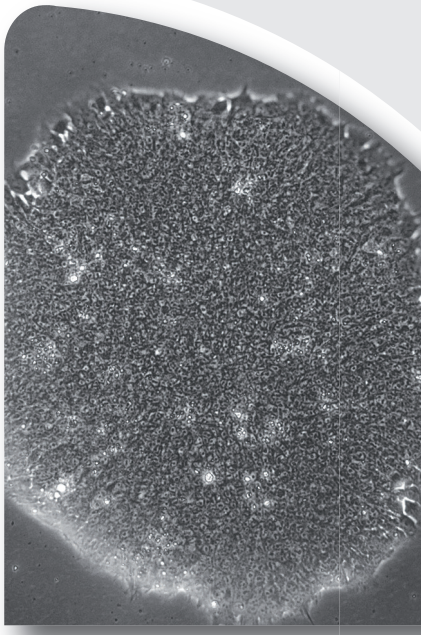
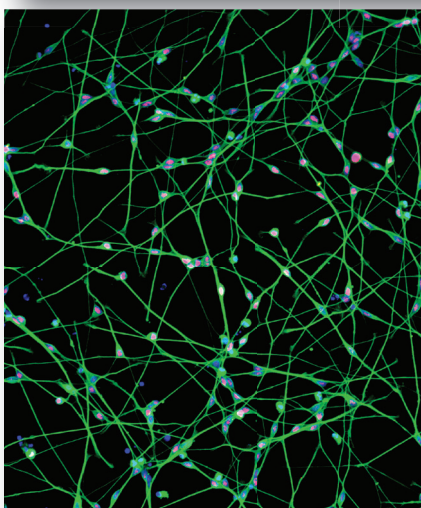
life&brain

Products and Services

for Human Stem Cell-Based Disease Modeling and Drug Discovery





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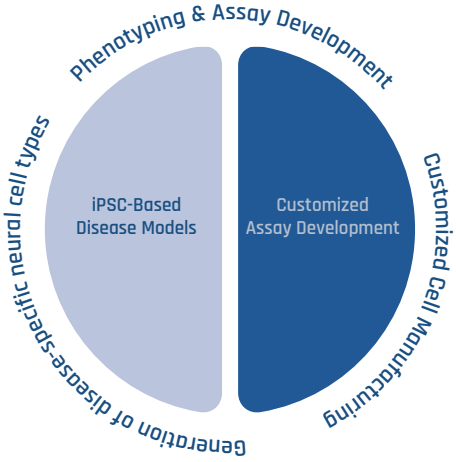
Custom iPSC Services for Nervous System Disease Modeling and Drug Screening



LIFE & BRAIN CELLOMICS specializes in providing stem cell-based cell culture systems and customer-specific services for neurological disease modeling and compound development. Our areas of competence encompass human stem cell-based model systems and their industrialization[1].
Proprietary technologies make it possible to generate pure, cryopreservable neural, neuronal and glial cells. Through our close collaboration with the outstanding scientists at the Institute of Reconstructive Neurobiology and as part of a large number of national and EU-wide research projects, we systematically implement innovative stem cell-based technologies and optimise these technologies for biomedical applications on an industrial scale. Our competence in the field of cell biology is complemented by many years of experience in co-development with leading manufacturers for laboratory automation.

Cellular Resources & Products

We have implemented a range of robust differentiation protocols for generating cryopreservable neural and glial cell populations derived from iPS cells suitable for disease modeling, including proprietary technologies for human neural stem cells (lt-NES®) and their derivatives as well as microglia.

Phenotypic and Assay Development

Using healthy and disease-specific iPS cell lines, we develop phenotypic assays together with our clients for use in disease research and drug discovery. Based on established differentiation protocols, we provide the adaptation and optimization of cell production and quality controls for assay development[2].

Concepts for Cell Culture Automation

The CELLOMICS platform has been using automated cell culture systems for human stem cell cultures for over 10 years[3]. Today, the CELLOMICS platform operates a fully automated system for generating and expanding human iPS cells. The StemcellFactory was developed together with partners from the fields of engineering and life sciences. Based on our many years of experience in this field and our biological expertise, we offer concept development and consulting for process automation.

1. Elanzew et al., 2015; Rehbach et al., 2019; Elanzew et al., 2020; Palladino et al., 2020; Piotrowski et al., 2021; Ibach et al., 2021; Wissfeld et al., 2021(a); Wissfeld et al., 2021(b); Semkova et al., 2022; Rodriguez-Gatica et al., 2022; Yang et al., 2022; Flitsch et al., 2022; Mathews et al., 2022
2. Rehbach et al., 2019; Ibach et al., 2021; Wissfeld et al., 2021(a); Wissfeld et al., 2021(b); Semkova et al., 2022; Mathews et al., 2022
3. Elanzew et al., 2015; Piotrowski et al., 2021; Elanzew et al., 2022

Customer Information

If you are interested in accessing LIFE & BRAIN's products and services please contact us:

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