Human neural organoids for drug testing and Neuroscience research

Sébastien Mosser, Liudmila Efremova, Didier Tirefort, Lasta Kocjancic-Curty, and Karl-Heinz Krause

Neurix SA, Geneva CH1205, Switzerland ; info@neurix.ch ; https://www.neurix.ch/

NEURIX is a biotechnology company specialized in neurotoxicity testing and drug efficacy assessment. We provide a service platform and tissue manufacturer activity alternative to animal experimentation through the use of in vitro three dimensional neural models derived from human pluripotent stem cells. These are called Minibrain™.

The quality of our induced pluripotent stem cell and embryonic stem cell lines is strictly maintained by expansion and culture in Nutristem® HPSC media provided by Biological Industries. Consequently, our cell Minibrain™ is precisely controlled, thus ensuring robust and reliable results in line with human physiological conditions.

1) Our technology
3-dimensional neural tissues derived from human pluripotent stem cells for drug testing.

- Bigger size & easy to handle
- Virus spreading modeling
- Glioblastoma invasion model
- Polymer biocompatibility testing

2) Our offer to speed-up drug testing and neuroscience research

Our activities and services

a) Tissue manufacturing
Shipment of Neurospheres and Minibrains for external use

b) In-house drug testing and research projects (CRO): acute or long term (1.5 months) exposure

CUSTOM RESEARCH PROJECT
- Mitochondrial activity (O2 / CO2 measurements)
- Histology
- Proteomics
- Genomics
- Calcium imaging (under development)

3) High reproducibility with the Nutristem® media

The culture of our ES and IPS cells in the Nutristem® culture media preserves the stability and pluripotency for at least 20 passages. The quality of our stem cells reflects the low variability after differentiation in 3-dimensional neural tissue.

4) Accelerated drug development

3R REDUCED ANIMAL TESTING - DRUG SCREENING IN DISCOVERY AND PRECLINICAL PHASES

Exemple package :
Toxicity testing on 14 compounds

Cytotoxicity testing on Neurons, 1 month exposure
Neurotoxicity testing on Neurons (synapsin reporter expression), 1 month exposure
Cytotoxicity testing on mature tissue, 1 month exposure

5) Exemple of success

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