

Custom Production of iPSC-Derived Neurons

NeuCyte Laboratories provides pure and ready-to-use iPSC (induced pluripotent stem cell)-derived glutamatergic and GABAergic induced neurons (iNs). This platform more closely resembles real human neurobiology than commonly used animal models and many other iPSC-based systems, providing the ability to effectively and confidently study the function of human neurons in vitro and to conduct CNS drug discovery.

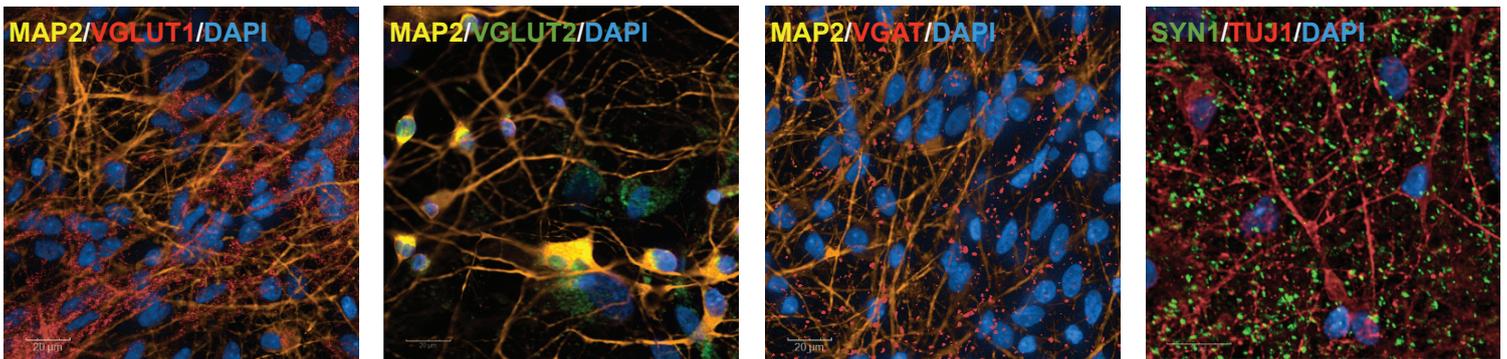


Figure 1. SynFire® iNs exhibit representative neuronal characteristics through immunostaining

SynFire iNs express pan-neuronal and subtype specific markers, rapidly mature to form complex networks and cellular morphologies. The modular aspect of SynFire neural cells allow for defined co-culture conditions and specific ratios of mixed neuronal subtypes, including excitatory glutamatergic and inhibitory GABAergic neurons. The markers shown here include pan-neuronal markers β 3-TUBB (TUJ1), MAP2, Synaptic marker SYNAPSIN1, glutamatergic neuron specific markers VGLUT1, VGLUT2, GABAergic neuron specific marker VGAT, and nuclear staining DAPI.

How you can work with NeuCyte

01

Contact Us
www.neucytelabs.com
inquiries@neucytelabs.com

02

Teleconference to
discuss project scope

03

Quotation

04

Purchase Order

05

iPSCs shipped
to NeuCyte

06

iPSC clean-up and
stabilization if needed

07

Cell Production

08

QC

09

Certificate of Analysis
and shipping

Why NeuCyte

Fast turnaround time



Our proprietary direct reprogramming technology enables us to generate neurons in a few weeks from qualified iPSC lines. Compared to most other platforms that require months for neuronal differentiation, our speed helps expedite your research and discovery work, saving time and cost.

Highly functional neurons with excellent lot-to-lot consistency



SynFire® iNs we produce have homogeneous populations. They exhibit the main characteristics of human primary neurons, including expression of pan-neuronal and subtype-specific markers, plus complex electrophysiology such as spontaneous and evoked action potentials and synchronized network activity. The lot-to-lot consistency allows for assay reproducibility for compound testing and drug discovery purposes.

Highly flexible and powerful process



Our neuron production process is very robust. We can start with iPSC lines carrying a wide variety of mutations or genetic backgrounds. We have the expertise to bring your iPSCs to the optimal state when starting the production.

Extensive support



NeuCyte Labs has put together an outstanding and focused scientific team. Our services are conducted by scientists who have the most extensive experience with our technology platform. As our client, we are not only in touch with you frequently through the production and QC process, we also provide you with expert support to make sure you get up and running with your project using the neurons we have produced for you.

**NeuCyte has the most suitable infrastructure to support your iN production needs.
Contact us with your unique inquiry today.**

