

# Human iPSC - Dopaminergic Neurons

Catalog #: IPS004 Cell #: >1x10<sup>6</sup> cells

Storage: Liquid Nitrogen until ready for culture. Product Format: Frozen Vial

While Culturing keep in 37°C CO<sub>2</sub> incubator

#### **GENERAL INFORMATION**

Human iPSC-Dopaminergic Neurons are derived from integration-free induced pluripotent stem cell (iPSC) lines. Cells are provided at passage 1. High expression of Tuj1 and MAP2 is observed 2 days after thawing and high levels of TH and FOXA2 are observed 7-10 days after thawing. For the monoculture of iPSC-Derived Dopaminergic Neurons using a 48-well plate format, follow the steps in our protocol.

Product is for Research use only.

Frozen Vials are shipped in a Dry Ice Package.

#### HANDLING OF ARRIVING CELLS

- 1. Check all containers for leakage or breakage.
- 2. Remove the frozen cells from the dry ice packaging and immediately place the cells at a temperature below-130°C, preferably in liquid nitrogen vapor, until ready for use.
- 3. To ensure the highest level of viability, thaw the vial and initiate the culture as soon as possible upon receipt. If upon arrival, continued storage of the frozen culture is necessary, it should be stored in liquid nitrogen vapor phase and not at -70°C. Storage at -70°C will result in loss of viability.

### **PRODUCT TESTING**

Negative for bacteria, yeast, fungi, and mycoplasma

## **MEDIUM**

We recommend customers use our Neuro Coating Solution (cat. HNM009) and Human Dopaminergic Neuron Maturation Medium (cat. HNM008) to culture these cells.

# PROTOCOL FOR THAWING THE CELLS

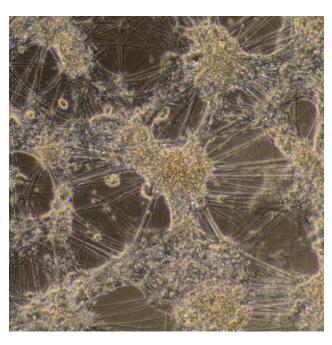
**Note:** If you have any questions or need clarification regarding the protocol for culturing these cells, please reach out to Dr. Jensen Auguste at (978) 608-1766 with your questions before beginning.

To ensure the highest level of viability, thaw the vial and initiate the culture as soon as possible upon receipt. If upon arrival, continued storage of the frozen culture is necessary, it should be stored in liquid nitrogen vapor phase and not at -70°C. Storage at -70°C will result in loss of viability.

# FOR RESEARCH USE ONLY

NEUROMICS REAGENTS ARE FOR IN VITRO AND CERTAIN NON-HUMAN IN VIVO EXPERIMENTAL USE ONLY AND NOT INTENDED FOR USE IN ANY HUMAN CLINICAL INVESTIGATION, DIAGNOSIS, PROGNOSIS, OR TREATMENT. THE ABOVE ANALYSES ARE MERELY TYPICAL GUIDES. THEY ARE NOT TO BE CONSTRUED AS BEING SPECIFICATIONS. ALL OF THE ABOVE INFORMATION IS, TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. HOWEVER, SINCE THE CONDITIONS OF USE ARE BEYOND OUR CONTROL, ALL RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT GUARANTEE, EXPRESS OR IMPLIED, ON OUR PART. WE DISCLAIM ALL LIABILITY IN CONNECTION WITH THE USE OF THE INFORMATION CONTAINED HEREIN OR OTHERWISE, AND
ALL SUCH RISKS ARE ASSUMED BY THE USER. WE FURTHER EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. V1-09809

- 1. Before thawing the cells, prepare the coating vessel by coating the plate with a our Neuro Coating Solution.
- 2. Thaw the cells and place the vial in a 37°C water bath with gentle agitation for 1-2 minutes. It's important to keep the cap out of the water to minimize the risk of contamination. Spray the vial with 70% ethanol, wipe the vial, and place it under your biosafety cabinet.
- Pipette the cells into a 15 mL conical tube with 5 mL of Human Dopaminergic Neuron Maturation Medium. Centrifuge at 300g for 5 minutes at room temperature.
- After removing the supernatant, re-suspend the cells in the Human Dopaminergic Neuron Maturation Medium with a supplement.
- Seed the cells on a pre-coated plate at the desired density. Incubate the cells in a 37°C CO2 incubator overnight. Expect to observe some cell debris after the cell recovery process. Perform a half-medium change every 2-3 days to maintain the culture.



## **CAUTION**

Handling human tissue-derived products is potentially bio-hazardous. Although each cell strain is tested negative for HIV, HBV, and HCV DNA, diagnostic tests are not necessarily 100% accurate; therefore, proper precautions must be taken to avoid inadvertent exposure. Always wear gloves and safety glasses when working with these materials. Never mouth pipette. We recommend following the universal procedures for handling products of human origin as the minimum precaution against contamination.

# FOR RESEARCH USE ONLY

NEUROMICS REAGENTS ARE FOR IN VITRO AND CERTAIN NON-HUMAN IN VIVO EXPERIMENTAL USE ONLY AND NOT INTENDED FOR USE IN ANY HUMAN CLINICAL INVESTIGATION, DIAGNOSIS, PROGNOSIS, OR TREATMENT. THE ABOVE ANALYSES ARE MERELY TYPICAL GUIDES. THEY ARE NOT TO BE CONSTRUED AS BEING SPECIFICATIONS. ALL OF THE ABOVE INFORMATION IS, TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. HOWEVER, SINCE THE CONDITIONS OF USE ARE BEYOND OUR CONTROL, ALL RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT GUARANTEE, EXPRESS OR IMPLIED, ON OUR PART. WE DISCLAIM ALL LIABILITY IN CONNECTION WITH THE USE OF THE INFORMATION CONTAINED HEREIN OR OTHERWISE, AND ALL SUCH RISKS ARE ASSUMED BY THE USER. WE FURTHER EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. V1-09809