

# Human IPSC - Astrocytes PSEN2 mutant, N141I, HET

Catalog #: IPS012 Cell #: >5x10<sup>5</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-Astrocytes PSEN2 mutant, N141I, HET are derived from integration-free induced pluripotent stem cell (iPSC) lines under a fully defined proprietary neural induction condition. The cells are obtained from a donor with the PSEN2 mutant, N141I, HET. This cell line provides a unique model system for a better understanding of Alzheimer's disease.

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 AlphaBioMatrix Solution (cat. HNM011) to culture these cells. Additionally, we recommend utilizing our Human iPSC Astrocyte Growth Medium (cat. PGB005) or Human iPSC Astrocyte Feeder-Free Growth Medium (cat. PGB006) (for feeder-free culture system).

## 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.

# 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
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- 1. Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of the water. Thawing should be rapid (approximately 2 minutes).
- Remove the vial from the water bath as soon as the contents are thawed. Decontaminate by dipping in or spraying with 70% ethanol. All the operations from this point on should be carried out under strict aseptic conditions.
- Carefully pipette the cells into a 15 ml conical tube with 5 ml of fresh culture media. For on-feeder culture systems, you can utilize Human iPSC Astrocyte Growth Medium, and for feeder-free culture systems, you can employ Human iPSC Astrocyte Feeder-Free Growth Medium.
- 4. Perform centrifugation at 50 x g for 5 minutes at room temperature. After centrifugation, remove the supernatant and resuspend the cells in culture media.
- Carefully seed the cells on AlphaBioMatrix coated plates. Incubate the cells in a 37°C CO2 incubator overnight.
- Change the media daily until the cells are ready to be passaged. It may take 1-2 weeks to fully recover the cells before passaging

**Note:** It is anticipated to observe 5-20% differentiated cells after thaw and during the early passages. The cells will stabilize after 2-3 passages with careful elimination of differentiated cells by mechanical or enzymatic methods.

#### **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.

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