



## Human Brain Astrocytes (HBA)

---

**Catalog #:** HMP202-T25

**Cell #:** >90% confluent (> 5X10<sup>5</sup> cells) in T25 flask

**Storage:** 37°C CO<sub>2</sub> incubator

**Product Format:** Proliferating culture

---

### General Information

Human Brain Microvascular Astrocytes were initiated by elutriation from dissociated normal human brain cortical tissues. HBAs are shipped in a proliferating culture with a confluency of >90 % at passage 1. Astrocyte-Growth medium containing 5% fetal bovine serum and growth supplement is recommended for culture. Cells have an average additional population doubling levels >10 when cultured.

### Characterization of the cells

- Cytoplasmic GFAP: <98% positive by immunofluorescence

HBMECs are negative for HIV-1, HBV, HCV, and mycoplasma.

### Recommended Products

- [Astrocyte-Growth Media – PGB003](#)
  - Astrocyte-Growth Media is freshly prepared by mixing two components: 450 ml of Astrocyte Basal Media and 50 ml of Astrocyte-Growth supplement.
- [Smooth Coat Solution – SC300](#)
  - Biocompatible complex of extracellular matrix binding solution
- OR
- [AlphaBioCoat Solution – AC001](#)
  - Premium Smooth Coat Solution. Biocompatible complex of extracellular matrix binding solution with growth factors. Ideal for culturing cells from frozen.
- [Cell Detachment Solution – ADF001](#)
  - Contains protease and collagenase activities in an isotonic, phosphate buffer solution with EDTA to detach primary cells and cell lines
- [1X Phosphate Buffer Solution - PBS300](#)

### Shipping

Proliferating culture in T25 flask.

### Handling of Arriving Cells

When you receive the cells, leave the flask in 37°C CO<sub>2</sub> incubator for 1 hour first, and then replace the transport medium with fresh Full medium. Let the cells grow for 24 hours before subculture.

*Note: Handling human derived products is potentially biohazardous. Although each cell strain tests 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 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

[www.neuromics.com](http://www.neuromics.com)

Neuromics Antibodies • 5325 West 74<sup>th</sup> Street, Suite 8 • Edina, MN 55439  
Phone 866-350-1500 • fax 612-677-3976 • email: [pshuster@neuromics.com](mailto:pshuster@neuromics.com)

## SUBCULTURE PROTOCOL

1. Coating T25 flasks:
  - a. Add 2 ml AlphaBioCoat Solution (AC001) into a T25 flask and ensure entire interior surface is coated with solution. After 30 minutes, dispose of AlphaBioCoat Solution by aspiration. Gently rinse and aspirate flask with phosphate buffer solution (PBS300). The flask is now ready for use(no need for overnight incubation when coated with AC001)
  - b. If you are using the coated flask the same day, add about 4 ml of Astrocyte-Growth media to the coated flask. \*If the media changes color from pink to yellow, aspirate and discard the media. Add 4ml of fresh media to the coated flask.
2. Inspect to make sure Flask is at 90% confluence, if not remove transport media, and add 5ml of fresh media to the flask. Place flask in 37°C incubator until cells are at 90% confluence. Change media every 2 days.
3. If flask is at 90% confluence, aspirate transport media from flask.
4. Rinse T25 flask containing cells with 5 ml 1XPBS (cat#PBS300).
5. Gently aspirate out the PBS after rinsing, and discard.
6. Add 2ml of RT trypsin/ EDTA or Cell Detachment Solution (ADF001) to T25 flask containing cells (ensure entire interior surface is cover).
7. Place T25 flask containing cells into 37°C incubator for 1 or 2 minutes (cells will normally come off of the surface within 1 or 2 minutes).
8. Suspend the cells with 10ml of Astrocyte-Growth medium (PGB003) and transfer equally into 2 pre-coated T25 flasks (the cells are now at a subculture ratio of 1:2).
9. There is no need to spin cells during subculture.
10. Proliferating cell culture: Astrocyte-Growth medium should be changed every 2 days. The cells normally become confluent within 7 days ( when split at a 1:2 ratio)
11. Use Astrocyte Basal media (PGB004) containing 0.5% FBS to induce quiescent cells (after 18-24 hours).

Note: Should any issues arise while using our cells, our team is here to help troubleshoot any issues. Our cells are backed by our one-time replacement or refund policy. Our recommended protocol including recommended products must be used to be eligible for replacement or refund. Cells that have been refrozen are no longer eligible for refund or replacement.

## 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

**[www.neuromics.com](http://www.neuromics.com)**

Neuromics Antibodies • 5325 West 74<sup>th</sup> Street, Suite 8 • Edina, MN 55439  
Phone 866-350-1500 • fax 612-677-3976 • email: [pshuster@neuromics.com](mailto:pshuster@neuromics.com)