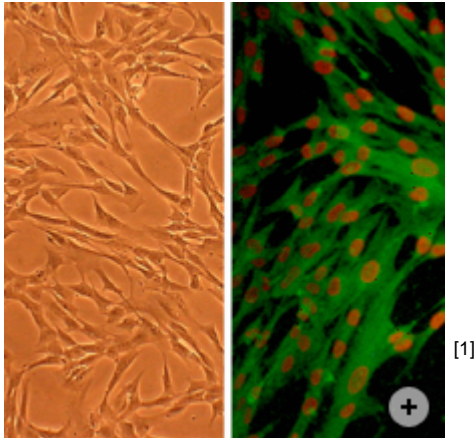


## Human Astrocytes: HA



**Left:** Human Astrocytes, HA.

**Right:** HA immunolabeled with anti-GFAP antibodies (green); nuclei are counterstained with PI (red).

### [FAQ](#) [2]

- [Product Description](#)
- [Product Details](#)

Human astrocytes (HA) are derived from human cerebral cortex. Astrocytes are the most abundant cells in the central nervous system where they perform many functions, such as providing mechanical support and nutrients to neurons and removal of wastes from neurons; providing signaling to endothelial cells; regulating neurogenesis and controlling synaptic function. As the recognition of the importance of astrocytes in nervous system is increasing, HA serve as a useful *in vitro* model for exploring the diversity of astrocytes functions.

**Characterization:** Stained positive for GFAP.

**Human Astrocytes from Cell Applications, Inc. have been used** as a normal control in a study investigating aberrant polycomb group (PcG) gene expression in human glioblastoma multiforme cells (Li, 2013). Results revealed that EZH2, PHF19, CBX8 and PHC2 were the most frequently upregulated PcG genes; and CBX7, CBX6, EZH1 and RYBP were the most frequently downregulated PcG genes. Importantly, CBX6 overexpression inhibited proliferation of glioblastoma cells and, since PcG proteins regulate epigenetic maintenance of cell identity, these results reveal the role of epigenetics in glioblastoma malignancy. Additionally, human astrocytes were used to investigate choline uptake system in normal and glioblastoma cells with the hope to improve tomography imaging in glioblastoma patients (Taguchi, 2014).

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**Tissue:** Human brain. Each lot is tested negative for HIV, Hepatitis B, Hepatitis C, mycoplasma, bacteria, and fungi.

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**Cryopreserved ampoule:** 2nd passage, >500,000 cells in Basal Medium containing 10% FBS & 10% DMSO.

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**Kit contains:** Ampoule of cryopreserved HA (882A-05), 500 ml of Human Astrocyte Growth Medium (821-500), and a Subculture Reagent Kit (090K).

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**Proliferating Cells:** Shipped in Growth Medium at 3rd passage in either flasks or multiwell dishes.

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**Population doublings:** Can be cultured at least 10 doublings

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**Source URL:** <http://www.cellapplications.com/primary-cells/human-astrocytes-ha>

**Links:**

[1] [http://www.cellapplications.com/sites/default/files/images\\_product\\_type/Human%20Astrocytes.png](http://www.cellapplications.com/sites/default/files/images_product_type/Human%20Astrocytes.png)

[2] <http://www.cellapplications.com/support/primary-cell-faq>