

Alpha-glia Expansion Medium

Catalog Number	AGEM-001
Product Name	Alpha-glia Expansion Medium
Storage	4°C
Size	500ml

***Caution:** The handling of human derived products has potential to be biologically. All Cell strains tested negative for HIV, HBV, and HCV DNA in diagnostic tests. Proper precautions must be taken to avoid exposure. Always wear proper protective equipment (Gloves, safety glasses, etc.) when handling these materials. We recommend following the universal procedures for handling products of human origin as the minimum precaution against contamination.

GENERAL INFORMATION:

Microglial cells are the dominant antigen presenting cells in the central nervous system. Under resting conditions, the expression of the molecular complex for presenting antigen, the major histocompatibility complex II (MHCII) and co-stimulatory molecules such as CD80, CD86 and CD40 is below detection. Upon injury the molecules are highly upregulated and the expression of this complex is essential for interacting with T lymphocytes. This upregulation has been described in a number of pathologies and is well studied in Multiple Sclerosis. Microglial cells phagocytose myelin, degrade it and present peptides of the myelin proteins as antigens. By releasing cytokines such as CCL2 microglial cells are important for recruiting leucocytes into the CNS. Microglia interact with infiltrating T lymphocytes and, thus, mediate the immune response in the brain. They have the capacity to stimulate proliferation of both TH1- and TH2-CD4 positive T cells.

Alpha-glia Expansion Medium is a complete medium designed to promote optimal growth of normal human brain-derived microglia in vitro. It is a sterile, liquid medium which contains:

- Essential and non-essential amino acids
- Vitamins
- Organic and inorganic compounds
- Hormones
- Growth factors
- Trace minerals
- Fetal bovine serum (5%).

The medium is bicarbonate buffered and has a pH of 7.4 when equilibrated in an incubator with an atmosphere of 5% CO₂/95% air. The medium is formulated (quantitatively and qualitatively) to provide a defined and optimally balanced nutritional environment that selectively promotes growth of normal human microglia in vitro.

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

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Alpha-glia Expansion Medium consists of 445 ml of basal medium, 25 ml of fetal bovine serum 25 ml of microglia growth supplement and 5 ml of penicillin/streptomycin solution.

Shipping Condition: Ambient temperature (Blue ice, seasonally)

Storage condition: Alpha-glia Expansion Medium is stored at 4°C in the dark. A change in color or appearance of precipitate may indicate deterioration.

Shelf Life: Alpha-glia Expansion Medium is stable for at least 2 months from the date of receiving under proper storage condition

Use of Alpha-glia Expansion Medium for culturing human Microglial cells:

- 1)-Take the amount of Alpha-glia Expansion Medium needed and warm to 37°C in a water bath or incubator
- 2)-Avoid frequent temperature change to the entire bottle of medium.
- 3)-Then Alpha-glia Expansion Medium are stable for at least 1 month stored at 4°C.
- 4)-We recommend changing medium every 2 days for regular cell culture.

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