



Astrocyte Conditioned Medium (ACM)

Catalog #1811

Description

Astrocytes are the most abundant cells in the central nervous system (CNS). Astrocytes provide a variety of biological functions, such as supporting endothelial cells involved in blood-brain barrier formation, providing nutrients to neurons, maintaining extracellular ion balance, and promoting repair in the CNS. Astrocyte conditioned medium (ACM) has been widely used to support the growth of neurons and endothelial cells in culture. ACM has also been shown to protect neurons from corticosterone-induced damage [1].

ACM is a liquid medium prepared from primary human astrocyte cultures by using astrocyte medium (Catalog #1801) conditioned for 48 hours. The medium is sterile filtered and has a pH of 7.4 when equilibrated in an incubator with an atmosphere of 5% CO₂/95% air.

Product Use

ACM is for research use only. It is not approved for human or animal use, or for application in *in vitro* diagnostic procedures.

Storage

Store the medium at 4°C. Protect from light.

Shipping

Gel ice.

References

[1] Zhu Z, Yang R, Fu X, Wang Y, Wu G. (2006) "Astrocyte-conditioned medium protecting hippocampal neurons in primary cultures against corticosterone-induced damages via PI3-K/Akt signal pathway." *Brain Res* 1114(1):1-10.

Caution: If handled improperly, some components of the medium may present a health hazard. Take appropriate precautions when handling it, including the wearing of protective clothing and eyewear. Dispose of properly.