



Astrocyte Conditioned Medium (ACM)

Catalog Number: 1811

Description

Astrocytes are the most abundant cells in the central nervous system. Studies have revealed that astrocytes exhibit a wide variety of biological activities, including biochemical support of endothelial cells that form the blood-brain barrier, provision of nutrients to neurons, maintain extracellular ion balance, and a role in the repair and scarring process of the brain and spinal cord following traumatic injuries. Astrocyte conditioned medium (ACM) has been widely used to support the growth of neuron and endothelial cell in culture. It protected the neurons of the primary hippocampal cultures against the corticosterone-induced damages [1].

ACM is a liquid medium prepared from primary astrocyte culture by using astrocyte medium (catalog number 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 it from light.

Shipping

Gel ice.

Reference

[1] Ze-Hua Zhu, Ru Yang, Xin Fu, Yan-Qing Wang and Gen-Cheng Wu (2006) Astrocyte-conditioned medium protecting hippocampal neurons in primary cultures against corticosterone-induced damages via PI3-K/Akt signal pathway. *Brain Research* 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.