Endothelial Cell Growth Supplement (ECGS)

Cell Culture-Growth Supplements

Catalogue Number: CC019

Description: Over the last three decades cell biologists have made tremendous gains on culturing non-fibroblast cell types. The finding that culture media containing serum were in fact growth inhibitory to many cell types, especially those of epithelial origin, necessitated the use of alternative supplementation. Although we are now able to use many purified growth factors and hormones, most primary culture systems still require some additional supplementation from crude tissue extracts for extended passaging especially at monolayer densities. ECGS continues to be the most successful of the tissue-sourced extracts to date and has allowed researchers to study normal primary cell types, particularly endothelial cell of a variety of origins. Because this EGCS prep is such a highly concentrated source of putative mitogens and growth factors it can be used at 10-20 times lower the volumes required of serum providing savings in costs. MACGENE's ECGS is made from fresh, unfrozen glands to ensure maximal mitogenic response. We do not lyophilize the extract since lyophilization has been shown to reduce the spectrum of biological activity. Our product is an aqueous extract formulated at 14 mg/ml active protein. Growth tests on vascular endothelial cells of mammalian origin indicate an optimal concentration range of 35 ug/ml for clonal growth and 70 ug/ml or 5ml per liter medium, for dense monolayers. Please note that proper hormone supplementation is required to ensure the best results. Please note that because this is a complex mixture of factors, different cell types may require unique levels especially when using alternative basal media and supplements.

Formulation: Sterile filtered, water soluble fraction

Protein Content: 14 mg/mL

Endotoxin: <20 EU/mL

Pack Size: 1 mL

Storage / Stability: -20 ºC for up to 2 years. Repeated freezing and thawing is not recommended.

References:

1. Maciag, T., et al., Journal of Biological Chemistry, 257, 5333 (1982).
2. Olander, J., et al., In Vitro, 16, 209 (1980).
3. Folkman, J., and Haudenschild, C., Nature, 288, 551 (1980).
4. Evans, C.H., and DiPaolo, J.A., Journal of the National Cancer Institute, 68, 127 (1982).
5. Pintus, C., et al., Journal of Immunological Methods, 61, 195 (1983).
6. Maciag, T., et al., Proc. Natl. Acad. Sci. USA, 76, 5674 (1979).

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