

Product Information

Endothelial cell growth supplement from bovine pituitary

Catalog Number **E0760**
Storage Temperature 2–8 °C

Synonym: ECGS

Product Description

Endothelial cell growth supplement (ECGS) is an extract of bovine pituitary glands containing growth promoting factors for vascular endothelial cells of mammalian origin.¹⁻⁴ ECGS has also been reported to be beneficial as a media supplement for the fusion and growth of hybridoma cells in monoclonal antibody production.⁵

Endothelial cell growth supplement is prepared using a modification of a published method.⁶ It is lyophilized from a sterile solution containing NaCl and streptomycin sulfate.

Biological Activity: EC₅₀ = 2–300 µg/ml

The proliferative activity of ECGS is tested in culture using fetal bovine heart endothelial (FBHE) cells (ATCC CRL 1395) seeded at low density. After incubation for 4–7 days, the cell number in wells containing 75 µg/ml of ECGS increased >5 fold over that of untreated cells.

Tested for bioburden and for mycoplasma.

Endotoxin: ≤20 EU/vial (LAL method)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

A stock solution can be prepared by reconstituting the contents of the vial in 5 ml of prewarmed (37 °C) sterile balanced salt solution. Gently rotate the vial until the contents are dissolved. This stock solution may be further diluted in sterile tissue culture medium to obtain the desired working concentration. Although the stock solution can be added aseptically to sterile tissue culture medium, it is recommended that medium containing diluted product be aseptically filtered prior to use.

- For growth of vascular endothelial cells the optimal range is 75–300 µg/ml.
- As a growth supplement for use in monoclonal antibody production the optimal range is 25–100 µg/ml.

Storage/Stability

Store the product at 2–8 °C. After reconstitution, the product may be stored in aliquots at –20 °C. Prolonged storage of product or repeated freezing and thawing is not recommended.

References

1. Maciag, T. et al., *Journal of Biological Chemistry*, **257**, 5333 (19-82).
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).

BG,JM,MAM 09/16-1