

Bovine Endothelial Cell Growth Factor (ECGF) Cell culture grade + Heparin

Catalog No. CSI12111 Quantity: 15 mg

Description: Endothelial cell growth factor (ECGF) is an extract of bovine brain containing growth

promoting factors for vascular endothelial cells of mammalian origin. ECGF has also been reported to be beneficial as a media supplement for the fusion and growth of hybridoma cells in monoclonal antibody production. Endothelial cell growth factor is prepared using a modification of the method of Maciag, et al. (1979) lyophilized from a

sterile solution containing NaCl and streptomycin sulfate.

Endothelial cells from human umbilical vein (HUVEC) can be established as primary cultures by traditional methods. The serial propagation of these cells has proved to be difficult. The long-term propagation of these cells *in vitro* can be achieved with an extract prepared from bovine brain. The introduction of a fibronectin or collagen matrix to the cell culture system allows to cultivate endothelial cells at clonal densities. With ECGF, the FCS requirement can be reduced. Heparin potentiates the mitogenic activity of crude preparations of ECGF. ECGF has also been reported to eliminate the need for feeder

cells in the clonal growth of hybridomas and other cell types.

Source: Bovine (BSE-free)

Formulation: 2.5 mg Heparin added per mg ECGF. Lyophilized from PBS, pH 7.4 without

preservatives.

Purity: Crude extract

Biological Activity: Optimum concentration for human umbilical vein endothelial cells (HUVEC) with heparin

(50 μg/ml) is at 20 μg/ml. As a growth supplement for use in monoclonal antibody

production the optimum range is 25 to 100 µg/ml.

Reconstitution: Centrifuge vial prior to opening. Endothelial cell growth factor is supplied as a sterile

lyophilized powder containing 15 mg protein per vial. To obtain a stock solution

reconstitute the contents of the vial in 5 ml of pre warmed (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 media to obtain the desired working concentrations. 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.

E-mail: info@cellsciences.com

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Storage & Stability: Prior to reconstitution store vial at 2-8°C. After reconstitution, the product may be stored

as aliquots at -20°C. Avoid repeated freeze-thaw cycles.

Applications: Bovine ECGF is effective on mouse, bovine and human cells.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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