

Bovine ECGF + Heparin (cell culture grade)

Bovine Endothelial Cell Growth Factor + Heparin

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date*
6 mg	W 1318919699	3608010710	February 2012

Description

Bovine ECGF + Heparin 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 cultivating 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.

- **Biological activity** See below
- **Source** *Natural, Bovine (BSE-free tested!)*
- **Purity** Crude extract
- **Stabilizer** None
- **Buffer** H₂O; w/o preservative
- **Heparin** 2.5mg /mg ECGF
- **Physical state** Sterile filtered, lyophilized

Biological Activity/ Working concentration

Optimum concentration for human umbilical vein endothelial cells (HUVEC) with heparin (50 µg/ml) is at 12 µg/ml. As a growth supplement for use in monoclonal antibody production the optimum range is 25 - 100 µg/ml.

Specificity

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

Reconstitution

Bovine ECGF is supplied as a sterile lyophilized powder containing 6 mg protein per vial. To obtain a stock solution reconstitute the contents of the vial in 2 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 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 is aseptically filtered prior to use. **The 6 mg ECGF are sufficient for 500 ml medium.**

*For lyophilized product if stored as indicated. Please contact our technical support if the product has expired.

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TECHNICAL DATA SHEET

Stability

Lyophilized Bovine ECGF + Heparin should be stored desiccated at 2-8°C. Upon reconstitution, the protein should be stored between 2-7 days at 4°C and for future use below -18°C. **Please avoid repeated freeze/thaw cycles.**

Usage

FOR RESEARCH USE ONLY

NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES

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