Rev. 1

Endothelial Cell Medium – Glucose Free (ECM-GF)

Catalog #1001-GF

Product Description

Endothelial cell medium-Glucose Free (ECM-GF), when used with Endothelial Cell Growth Supplement (ECGS), FBS and additional glucose (Cat #0893) is a medium designed for optimal growth of normal endothelial cells *in vitro*. It is a sterile, liquid medium which contains essential and non-essential amino acids, vitamins, organic and inorganic compounds, hormones, growth factors, trace minerals and a low concentration of fetal bovine serum (5%). The medium is HEPES and bicarbonate buffered and has a pH of 7.4 when equilibrated in an incubator with an atmosphere of 5% CO_2/95% air. The medium is formulated (quantitatively and qualitatively) to provide an optimally balanced nutritional environment that selectively supports the growth of normal endothelial cells *in vitro*.

ECM-GF does not contain glucose**,** an important source of energy for cell growth. ECM-GF should be supplemented with Glucose Solution (GS; Cat #0893) prior to use. The recommended glucose concentration is 1g/L but may vary with experimental conditions.

Components

ECM-GF consists of 500 ml of basal medium, 25 ml of fetal bovine serum (FBS, Cat. #0025), 5 ml of Endothelial Cell Growth Supplement (ECGS, Cat. #1052) and 5 ml of penicillin/streptomycin solution (P/S, Cat. #0503). *Note: FBS, ECGS and P/S are not pre-mixed in ECM-GF; they must be added separately to make the complete ECM-GF.*

NOTE: ECM-GF should be supplemented with Glucose Solution (GS; Cat #0893) prior to use. Glucose Solution is not included and should be purchased separately.

Product Use

ECM-GF 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 basal medium at 4°C and the ECGS, FBS and P/S solution at -20°C. Protect from light.

Shipping

Basal medium: room temperature. Supplements: dry ice.

Instructions for Use

Thaw ECGS, FBS and P/S solution at 37°C. Gently tilt the tubes several times to ensure the contents are completely mixed before adding to the medium. Spray the medium bottle and tubes with 70% ethanol, and wipe to remove excess liquid. In a sterile field, remove the caps without touching the interior threads with fingers. Add ECGS, FBS and P/S solution to the medium and mix well. Aseptically add the appropriate volume of Glucose Solution to achieve the desired

concentration. Since several components are light-labile, the medium should not be exposed to light for extended periods. We do not recommend warming medium in a 37^{o}C water bath prior to use. When stored in the dark at 4^{o}C, the reconstituted medium is stable for one month.

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.