

Product Information

ENDOTHELIAL MEDIUM KIT

Product No. **EMK-2**

Store at $-20\text{ }^{\circ}\text{C}$

Product Description

Endothelial Medium Kit is a sterile, liquid tissue culture medium intended for use as one component in a complete culture environment for the growth of Human Umbilical Vein Endothelial Cells (HUVEC). The kit contains Endothelial Basal Medium, Product No. E 6769, and Endothelial Medium Supplement, Product No. E 6894. The Endothelial Basal Medium must be supplemented with the Endothelial Medium Supplement to fully support plating and proliferation of HUVEC.

Endothelial Basal Medium contains essential and non-essential amino acids, vitamins, trace minerals, organic compounds, and inorganic salts. It is HEPES and bicarbonate buffered. Endothelial Basal Medium contains no hormones, growth factors or other proteins **and does not contain antibiotics or antimycotics.**

Endothelial Medium Supplement is a sterile, concentrated (50x) solution. It contains all of the supplements necessary for the growth of HUVEC when added to Endothelial Basal Medium. Each tube (2 ml or 10 ml) of Endothelial Medium Supplement contains fetal bovine serum, basic fibroblast growth factor, heparin, epidermal growth factor and hydrocortisone.

REAGENT

For Laboratory Use Only.

Not for drug household or other uses.

Product Use

Endothelial Medium Kit is intended for use in the routine culture of HUVEC for research purposes. Supplemented Endothelial Basal Medium will support the plating and proliferation of HUVEC at varying culture densities from 1,000 cells/cm² to high density (8x10⁴ cells/cm²). Additional applications for use may include primary isolation of human endothelial cells from umbilical vein. It is intended for use in a 5% CO₂ incubator and when equilibrated in this atmosphere has a pH of 7.4

Preparation of Supplemented Medium

Endothelial Basal Medium is shipped frozen. When the medium is thawed it may contain a precipitate. The precipitate will dissolve and disappear after the medium is completely thawed and mixed thoroughly. We recommend the following procedure for thawing Endothelial Basal Medium:

1. Thaw Endothelial Basal Medium at room temperature overnight. If more rapid thawing is desired, thaw the medium in a water bath at 37 °C. Remove the medium from the water bath when a small amount of ice remains in the bottle. During the thawing procedure, cover the medium to protect it from the light.
2. After the medium has thawed (or when a small amount of ice remains), ensure that the cap to the bottle is tight and swirl the medium vigorously for 30 seconds.
3. Place the bottle in a refrigerator at 4 °C for 30 minutes.
4. Remove from the refrigerator and swirl the bottle vigorously for 30 seconds. The precipitate should now be dissolved. If a small amount of precipitate remains, repeat steps 2, 3, and 4.

The formation and re-dissolving of the precipitate will not affect the performance of the medium. Simply add the appropriate amount of Endothelial Medium Supplement and you are ready to culture your cells.

5. Thaw one tube of Endothelial Medium Supplement
6. Wipe the outside of the containers with a disinfecting solution such as 70% ethanol.
7. In a laminar flow culture hood using sterile technique, transfer the entire contents of the tube of Endothelial Medium Supplement to the bottle of Endothelial Basal Medium.

8. Tightly cap the bottle of supplemented medium and swirl the contents to insure a homogeneous solution. Yields 100 ml or 500 ml of complete medium.

Product Storage

Endothelial Medium Kit is shipped frozen and should be stored at -20 °C. Once completely thawed, Endothelial Basal Medium should be stored at 2-8 °C in the dark, do not refreeze. Endothelial Basal Medium is stable at 2-8 °C in the dark for up to 3 months. Endothelial Medium Supplement should be stored at -20 °C. Complete medium may be stored at 2-8 °C for up to 1 month in the dark.

Deterioration of the liquid medium may be recognized by any or all of the following: [1] pH change, [2] precipitate or particulate matter throughout the solution, [3] cloudy appearance [4] color change. The nature of supplements added may affect storage conditions and shelf life of the medium. Product labels bear expiration date.

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