

Datasheet

Endopan 3

Special Medium Formulation for Endothelial Cells

Product	Description	Catalogue-No.	Size
Endopan 3 ready-to-use	Special medium for human endothelial cells Complete medium	P04-00100	500 ml
Endopan 3 kit	Special medium for human endothelial cells Kit with 9 supplements	P04-0010K	500 ml

General Information:

Endothelial cells line blood and lymphatic vessels and the internal cavities of the heart. They mostly rest on a basal membrane where they display a strongly flattened, polygonal form. Adhesion among the cells is enabled by desmosomes and tight-junctions. With a total cell number of about one trillion (10^{12}), the endothelium is one of the biggest organs of the body and plays a key role in many physiological and patho-physiological processes (e.g. cell-based immune response, wound healing, inflammation, allergy, cardiovascular diseases, tumor growth). A huge number of soluble factors circulating in the blood or released by neighbouring cells control proliferation or apoptosis of endothelial cells and the invasion and migration of leucocytes to the endothelium, thereby regulating the maintenance, degeneration, or regeneration of blood vessels.

Product Description:

Endopan 3 ready-to-use (P04-00100) is a medium specially developed for the *in vitro* culture of human endothelial cells containing all components necessary for optimal growth. It is designed for use in an incubator at 37° C with a 5% CO₂ atmosphere. Please avoid repeated warming of complete medium. Prepare only the amount needed in a separate sterile tube. For a T25 cell culture flask it is recommended to use 5 ml of Endopan 3. For smaller or larger culture area, please adjust volume accordingly. After thawing of cells, change medium after 24 h to remove un-attached cells; for maintenance and propagation, change medium every two or three days. For cultures close to confluence or for maximum proliferative response, it is recommended to use more medium or more frequent changes. Store at 2-8° C in the dark. Expiry: 3 months.

Endopan 3 kit (P04-0010K) is provided with FBS and supplements in separate sterile packing. This will enable the user to prepare a medium for special application. For example, FBS, VEGF, FGF-2, or other components may be omitted from the complete medium for specific experimental settings. Please note that such a formulation will not promote optimal cell growth. Therefore, this composition cannot be used for routine long-term culture of endothelial cells. Please make sure that sterility is not compromised when adding individual components to prepare complete medium. The medium should be thoroughly but carefully mixed after addition of all components to assure a homogeneous solution. Store basal or complete medium at 2-8° C, store supplements at -20° C. Expiry: 12 months.

Endopan 3 kit contains the following components in single packing:

- EGF (human recombinant Epidermal Growth Factor)
- FGF-2 (basic Fibroblast Growth Factor)
- VEGF (Vascular Endothelial Growth Factor)
- Vitamin C (Ascorbic Acid phosphate)
- R3-IGF-1 (human recombinant Insulin-like Growth Factor)
- FBS (Fetal Bovine Serum)
- GA (Gentamicin/Amphotericin)
- Hydrocortisone
- Heparin

Basal medium (w/o supplements) and complete/ready-to-use medium should not be frozen!

WARNING: Endopan 3 is a low serum medium (3% FBS content). It is not suited for stopping trypsin reaction. Please use trypsin inhibitor solution or FBS to neutralize trypsin.

To avoid damage to cells, HUVEC should be exposed only for a minimum period of time to trypsin.

Product Intended Use: FOR RESEARCH USE ONLY!

Not approved for human or animal diagnostic or therapeutic procedures.

Endopan 3 is suitable for the culture of:
Human Umbilical Vein Endothelial Cells
Human Umbilical Artery Endothelial Cells
Human Pulmonary Artery Endothelial Cells
Human Saphenous Vein Endothelial Cells

Although not extensively tested, it has been shown that Endopan 3 can also be used with endothelial cells of bovine, pig, rat, and rabbit origin.

Product warranty:

PAN Biotech GmbH warrants full functionality of the medium for supporting the growth of human endothelial cells. If you feel there is a problem with this product, please contact PAN Biotech company via email (info@pan-biotech.com) or telephone +49-8543-601630 and save the respective batch of medium to send back upon request.

Quality control:

Each batch of Endopan 3 is tested for its proliferation promoting capacity on primary HUVEC to guarantee optimum performance and reliability. In addition, the medium is tested for absence of microbial contamination (bacteria, yeast, fungi, mycoplasma).

PAN Biotech GmbH offers a special custom media service for designing media according to your needs. Please inquire for details. We will prepare your special formulation.

Technical Service:

Additional information can be found on our website : www.pan-biotech.com

For further help, comments or questions, please contact your local PAN Biotech partner or the technical department of PAN Biotech company via email (info@pan-biotech.com) or telephone +49-8543-601630.