

ENDOPAN MV

Special medium formulation for microvascular endothelial cells

Product	Description	Catalogue-No.	Size
ENDOPAN MV ready-to-use	Special medium for human microvascular endothelial cells - Ready-to-use	P04-00200	500 ml
ENDOPAN MV kit	Special medium for human microvascular endothelial cells - Kit with 8 supplements	P04-0020K	500 ml

General Information:

Endothelial cells line the blood and lymphatic vessels and the internal cavities of the heart. They display a strongly flattened, polygonal form and mostly rest on a basal membrane. They adhere to each other 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, tumour 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 MV ready-to-use (P04-00200) is a specially developed medium for the *in vitro* culture of human microvascular endothelial cells (MV-EC) 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 MV. For smaller or larger culture area, please adjust volume accordingly. After thawing of cells, change the medium after 24 h to remove unattached cells; for maintenance and propagation, change the 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 MV kit (P04-0020K) 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 can not 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 carefully but thoroughly 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 MV kit (P04-0020B + P04-0020S) 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)
- GA (Gentamicin/Amphotericin)
- Hydrocortisone
- FBS (Foetal Bovine Serum)

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

WARNING: ENDOPAN MV is a low serum medium (6% 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, MV-EC 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 MV is suitable for the culture of:

Human Microvascular Endothelial Cells from e.g. neonatal dermis (foreskin) or adult dermal microcapillaries.

Although not extensively tested, it has been shown that ENDOPAN MV 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 MV-EC. 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 MV is tested for its proliferation promoting capacity on primary human MV-EC 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.