

Datasheet

Endopan 300 SL Kit

Serum-free endothelial cell culture kit

Product	Description	Catalogue-No.	Size
Endopan 300 SL Kit	Serum-free complete medium for human endothelial cells, Kit with 9 supplements	P04-0065K	500 ml

Product description

Endopan 300 SL is suitable for the culture of human umbilical vein endothelial cells (HUVEC), which are the cells of choice for studying function and pathology of endothelial cells (e.g. angiogenesis)¹. They can be cultured continuously with a stable growth rate in serum-free media.

Endopan 300 SL Kit (P04-0065K) is provided with serum replacement Panexin SL-S and other supplements in separate sterile packaging. This will enable the user to prepare a medium for special applications. For example, VEGF, FGF-2 or other components may be omitted from the complete medium for specific experimental settings.



Figure 1: HUVEC cell growth over 14 days cultivation

Table 1: Kit composition, Size, Storage conditions & Stability

Component	Description	Size	Storage	Stability
Basal Medium (P04-0065B)	Serum-free medium	500 ml	2-8°C	2 years
Panexin SL-S	Serum replacement	50 ml	-20°C	6 months
EGF	Epidermal growth factor, hum. rec.	0.5 ml	-20°C	1 year
FGF-2	Fibroblast growth factor, hum, rec.	0.5 ml	-20°C	1 year
VEGF	Vascular endothelial growth factor, hum. rec.	0.5 ml	-20°C	1 year

R3-IGF-1	Insulin-like growth factor, hum. rec.	0.5 ml	-20°C	2 years
Vitamin C	Ascorbic acid phosphate	0.5 ml	-20°C	2 years
GA	Gentamicin/Amphotericin	0.3 ml	-20°C	2 years
Hydrocortisone	Hormone	0.1 ml	-20°C	2 years
Heparin	Anticoagulant	0.5 ml	-20°C	2 years

Instructions for use

Endopan 300 SL is a medium especially developed for HUVECs containing components for optimal growth and proliferation under serum-free conditions.

- For optimal growth, supplement the basal medium with Panexin SL-S and the remaining eight supplements. Antibiotics can be omitted
- Please note: After adding Panexin SL-S, a slight turbidity is a normal effect and does not prevent the performance of cell growth
- Prepare pre-coated flasks with 0.1% gelatine solution (or a suitable animal-free substitute) for 15 – 60 mins at 37°C
- Take a vial frozen cells and thaw it
- Immediately transfer the content of the vial to a centrifuge tube pre-filled with medium and centrifuge it
- Discard the supernatant and resuspend the cells in the remaining droplet
- Add fresh medium to the droplet, count the cells, give the suspension into the pre-coated, with fresh medium pre-filled flask and add antibiotics
- For detachment of cultured cells remove the medium and wash it with DPBS
- Add 2 ml Accutase and incubate the flask for several minutes. Observe cell detachment under a microscope
- Thereafter resuspend the cells in growth medium and the remaining Accutase. After centrifugation, supernatant-discarding and resuspension in fresh medium, count the cells, give the suspension into a flask, pre-coated with gelatine solution (or a suitable animal-free substitute) and incubate it at 37°C with 5% CO₂
- Feed cells with fresh medium every second day
- A split ratio of 1:2 is recommended depending on the growth rate

Technical support

For any technical support, questions or remarks please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email (info@pan-biotech.com) or phone +49-8543-601630.

FOR RESEARCH USE ONLY! Not approved for human or animal diagnostic or therapeutic procedures.

¹ Park HJ et al. (2006). "Human umbilical vein endothelial cells and human dermal microvascular endothelial cells offer new insights into the relationship between lipid metabolism and angiogenesis". Stem Cell Rev. **2** (2): 93–102.