Endothelial cell media

PromoCell®

Instruction manual

Endothelial Cell Growth Medium

Product	Size	Catalog number
Endothelial Cell Growth Medium (Ready-to-use) – Includes Basal Medium and SupplementMix	500 ml	C-22010
Endothelial Cell Growth Medium Kit – Includes Basal Medium and SupplementPack	500 ml	C-22110
Endothelial Cell Basal Medium	500 ml	C-22210
Endothelial Cell Basal Medium, phenol red-free	500 ml	C-22215
Endothelial Cell Growth Medium SupplementMix	for 500 ml	C-39215
Endothelial Cell Growth Medium SupplementPack	for 500 ml	C-39210

Endothelial Cell Growth Medium 2

Product	Size	Catalog number
Endothelial Cell Growth Medium 2 (Ready-to-use) – Includes Basal Medium and SupplementMix	500 ml	C-22011
Endothelial Cell Growth Medium 2 Kit – Includes Basal Medium and SupplementPack	500 ml	C-22111
Endothelial Cell Basal Medium 2	500 ml	C-22211
Endothelial Cell Basal Medium 2, phenol red-free	500 ml	C-22216
Endothelial Cell Growth Medium 2 SupplementMix	for 500 ml	C-39216
Endothelial Cell Growth Medium 2 SupplementPack	for 500 ml	C-39211

Recommended for

- Human Umbilical Vein Endothelial Cells (HUVEC)
- Human Umbilical Artery Endothelial Cells (HUAEC)
- Human Pulmonary Artery Endothelial Cells (HPAEC)
- Human Saphenous Vein Endothelial Cells (HSaVEC)

Product description

Our Endothelial Cell Growth Media are low-serum media developed for the *in vitro* cultivation of endothelial cells from large blood vessels. The media are optimized for primary human cells, but can also be used for bovine, porcine, murine, rabbit, elephant, caprine, canine, and rat endothelial cells.

Endothelial Cell Growth Media are available as medium (ready-to-use) or as a Medium Kit.

The medium (ready-to-use) consists of a 500 ml bottle of basal medium and one vial of SupplementMix. The Medium Kit consists of a 500 ml bottle of basal medium and the SupplementPack (a set of individual vials with pre-measured supplements) allowing the user full control over the media formulation. Adding the SupplementMix or the SupplementPack to the basal medium results in the complete growth medium. Basal medium (with or without phenol red) as well as SupplementMix and SupplementPack can also be purchased separately.

Supplementation details

Our Endothelial Cell Growth Media contain all the growth factors and supplements necessary for the optimal growth of human endothelial cells. Endothelial Cell Growth Medium 2 lacks Endothelial Cell Growth Supplement (ECGS, bovine hypothalamic extract), but contains Insulin-like Growth Factor (Long R3 IGF-1), and Vascular Endothelial Growth Factor. For details see the table below.

Note: The table below does not disclose the complete formulation of the respective product. It includes only **selected additives.**

Our Endothelial Cell Growth Media do not contain antibiotics or antimycotics and are formulated for use in an incubator with an atmosphere of 5% CO_2 .

Preparation of the supplemented medium for use

Thaw the SupplementMix or SupplementPack at 15–25°C. Aseptically mix the supplement solutions by carefully pipetting up and down. Then, transfer the entire content of each supplement to the basal medium. Close the bottle and swirl gently until a homogenous mixture is formed.

Note: Light flocculation may be seen upon thawing the supplements containing ECGS/heparin. This does not affect the activity. Optionally, the precipitate can be removed by centrifugation under sterile conditions.

Storage and stability

Store the basal medium at 4–8°C in the dark and the SupplementMix or SupplementPack at -20°C immediately after arrival. Do not freeze the basal medium. If stored properly, the products are stable until the expiry date stated on the label. After the supplements are added to the basal medium, store at 4–8°C and use within 6 weeks. Do not freeze the complete medium.

For use, pre-warm only an aliquot of the complete medium at 15–25°C and keep the remaining medium refrigerated at 4–8°C.

Quality control

All lots of PromoCell Endothelial Cell Media are subjected to comprehensive quality control tests using primary human endothelial cells. Each lot is checked for growth promoting activity and for the absence of microbial contaminants (fungi and bacteria).

Intended use

These products are for *in vitro* use only and not suitable for diagnostic or therapeutic procedures. For safety precautions please see appropriate MSDS.

Note: Due to their low serum content or the absence of serum, PromoCell media are not suitable for trypsin neutralization (e.g. when splitting the cells). Instead we recommend using our DetachKit (C-41200, C-41210, C-41220), which contains HEPES BSS, Trypsin/EDTA and Trypsin Neutralizing Solution.

Final supplement concentrations* (after addition to the medium)	Endothelial Cell Growth Medium	Endothelial Cell Growth Medium 2
Fetal Calf Serum	0.02 ml/ml	0.02 ml/ml
Endothelial Cell Growth Supplement	0.004 ml/ml	—
Epidermal Growth Factor (recombinant human)	0.1 ng/ml	5 ng/ml
Basic Fibroblast Growth Factor (recombinant human)	1 ng/ml	10 ng/ml
Insulin-like Growth Factor (Long R3 IGF, recombinant human)	—	20 ng/ml
Vascular Endothelial Growth Factor 165 (recombinant human)	—	0.5 ng/ml
Ascorbic Acid	—	1 µg/ml
Heparin	90 µg/ml	22.5 µg/ml
Hydrocortisone	1 µg/ml	0.2 µg/ml

** Note: The table above does not disclose the complete formulation of the respective product. It includes only selected additives.*

If you require special media modifications, we offer a custom media service starting at 10 bottles per order.
Contact us at info@promocell.com to find out more.

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