Endothelial Cell Media MV/MV2

Instruction Manual

Endothelial Cell Growth Medium MV

Product	Size	Catalog Number
Endothelial Cell Growth Medium MV (Ready-to-use) – Includes Basal Medium and SupplementMix	500 ml	C-22020
Endothelial Cell Growth Medium MV Kit – Includes Basal Medium and SupplementPack	500 ml	C-22120
Endothelial Cell Basal Medium MV	500 ml	C-22220
Endothelial Cell Basal Medium MV, phenol red-free	500 ml	C-22225
Endothelial Cell Growth Medium MV SupplementMix	for 500 ml	C-39225
Endothelial Cell Growth Medium MV SupplementPack	for 500 ml	C-39220

Endothelial Cell Growth Medium MV2

Product	Size	Catalog Number
Endothelial Cell Growth Medium MV2 (Ready-to-use) – Includes Basal Medium and SupplementMix	500 ml	C-22022
Endothelial Cell Growth Medium MV2 Kit – Includes Basal Medium and SupplementPack	500 ml	C-22121
Endothelial Cell Basal Medium MV2	500 ml	C-22221
Endothelial Cell Basal Medium MV2, phenol red-free	500 ml	C-22226
Endothelial Cell Growth Medium MV2 SupplementMix	for 500 ml	C-39226
Endothelial Cell Growth Medium MV2 SupplementPack	for 500 ml	C-39221

Recommended for

- Human Dermal Microvascular Endothelial Cells (HDMEC)
- Human Coronary Artery Endothelial Cells (HCAEC)
- Human Aortic Endothelial Cells (HAoEC)
- Human Pulmonary Microvascular Endothelial Cells (HPMEC)
- Human Dermal Lymphatic Endothelial Cells (HDLEC)
- Human Dermal Blood Endothelial Cells (HDBEC)
- Human Cardiac Microvascular Endothelial Cells (HCMEC)
- Human Uterine Microvascular Endothelial Cells (HUtMEC)

Product Description

Our Endothelial Cell Growth Media MV/MV2 have been developed for the *in vitro* cultivation of endothelial cells from microvascular vessels, the coronary artery, and the aorta. They are optimized for primary human cells, but can also be used for bovine, porcine, canine, murine, and rat endothelial cells. The Endothelial Cell Growth Media MV/MV2 are available as Medium (Ready-to-use) or as 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 SupplementPacks can also be purchased separately.

Supplementation Details

Our Endothelial Cell Growth Media MV/MV2 contain all the growth factors and supplements necessary for the optimal growth of human endothelial cells. Endothelial Cell Growth Medium MV2 lacks Endothelial Cell Growth Supplement (ECGS, bovine hypothalamic extract), but contains basic Fibroblast Growth

Factor, Insulin-like Growth Factor (Long R3 IGF-1), and Vascular Endothelial Growth Factor (for details see the table above). The Endothelial Cell Growth Media MV/MV2 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 to 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 to 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 adding the supplements to the Basal Medium, the shelf life of the complete medium is 6 weeks at 4 to 8°C. 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 to 8°C.

Quality Control

All lots of PromoCell Endothelial Cell Media MV/MV2 are subjected to comprehensive quality control tests using primary human endothelial cells. Each lot is checked for growth promoting activity, adherence rate, and typical morphology of the tested endothelial cells. Approved in-house lots of media are used as a reference. In addition, all lots of media have been tested for the absence of microbial contaminants (fungi, bacteria, mycoplasma).

Intended Use

The products are for *in vitro* use only and not 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 MV	Endothelial Cell Growth Medium MV2
Fetal Calf Serum	0.05 ml/ml	0.05 ml/ml
Endothelial Cell Growth Supplement	0.004 ml/ml	—
Epidermal Growth Factor (recombinant human)	10 ng/ml	5 ng/ml
Basic Fibroblast Growth Factor (recombinant human)	—	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	—
Hydrocortisone	1 µg/ml	0.2 µg/ml

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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