

## EndoGo<sup>™</sup> XF Culture Medium

A defined, xeno-free culture medium for the expansion of endothelial cells



- Defined, xeno-free, serum-free medium
- cGMP-manufactured
- Supports long-term expansion of large and small vessels
- Maintains high proliferation potential, typical morphology and EC marker expression

# The first commercially available xeno-free, cGMP media for high-quality expansion

EndoGo<sup>™</sup> XF Medium is an innovative culture medium specially designed for long-term expansion of high-quality large and small vessel endothelial cells (ECs) from various sources, without the need for animal-derived supplements. EndoGo<sup>™</sup> XF Medium provides an optimized nutritional environment that selectively promotes proliferation of human ECs, while maintaining typical cobblestone-like cell morphology, phenotypic surface marker profiles, and angiogenic differentiation potential.

EndoGo<sup>™</sup> XF Medium supports microvascular ECs (MECs) from blood and lymph vessels as well as ECs derived from dermal, cardiac, lung, bladder, and adipose tissues. In addition, EndoGo<sup>™</sup> XF Medium supports ECs from arterial or venous sources (e.g. HUVEC), as well as human endothelial progenitor cells (EPCs). While typical EC and EPC cultures require the addition of animal-derived serum, EndoGo<sup>™</sup> pairs exceptionally well with PLTGold® Human Platelet Lysate to create cGMP, xeno-free culture environments for the advancement of EC- and EPC-based cellular therapies.

#### **Cell proliferation**

Superior cell number and PDL of human microvascular endothelial cells in EndoGo<sup>™</sup> XF Medium.



### Efficient isolation and expansion



Figure 2: Isolation of Cord Blood hEC and EPC expansion using EndoGo<sup>™</sup> XF Medium. ECs were expanded for 7 days in various culture media. A. Quantitative analysis of day 7 cord blood EC CD31+/CD34+ population. B. Quantitative analysis of day 7 cord blood EC CD31+/CD34- population. EndoGo<sup>™</sup> XF Medium with hPL significantly expands cord blood ECs in comparison to other culture media conditions.

#### **Cell morphology and characteristics**

EndoGo<sup>™</sup> XF Medium promotes proliferation of both microvascular and macrovascular human endothelial cells from a variety of sources while maintaining classical EC morphology, typical EC marker profiles, standard gene expression profiles, and similar angiogenic features.

#### Macrovascular ECs (HUVEC)



Figure 3: Microvascular endothelial cells and macrovascular endothelial cells maintain classic cobblestone-like morphology after expansion for several sequential passages with equal seeding (5000 cells/cm<sup>2</sup>) in EndoGo<sup>™</sup> XF +2% OTC human AB serum A. hFN pre-coated dishes. B. Expanded cells preserved endothelial cell features (EC marker expression) and C. angiogenic potential to form capillary-like tubes.

ORDERING INFORMATION		
PRODUCT	CAT.#	SIZE
EndoGo™ XF Medium*	05-400-1A-KT	500 mL
PLTGold® Human Platelet Lysate (Clinical Grade)	PLTGOLD27GMP PLTGOLD100GMP PLTGOLD500GMP	27 mL 100 mL 500 mL
Human Fibronectin	05-750-1F 05-750-1H	1 mL 5 mL

 ${}^* {\sf Medium\ includes\ basal\ and\ supplement.\ Bulk\ orders\ and\ custom\ packaging\ are\ available\ upon\ request.}$ 

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C HPMEC (Human Pulmonary Microvascular Endothelial Cells) proliferation



Figure 1: A. Cell counts and B. population doubling level (PDL) of HDMEC, as well as C. cell counts of HPMEC expanded for several passages in EndoGo<sup>™</sup> XF Medium in comparison to commercial FBS-containing medium. Viable cells were counted using ChemoMetec Viability and Cell Count Assay. HPMEC did not survive P5 in the FBS-containing medium.