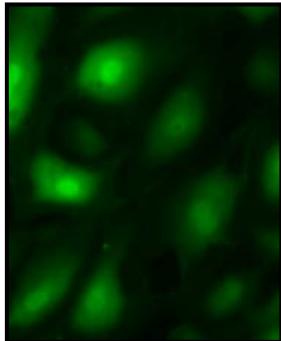


## TTFLUOR™ HUVEC

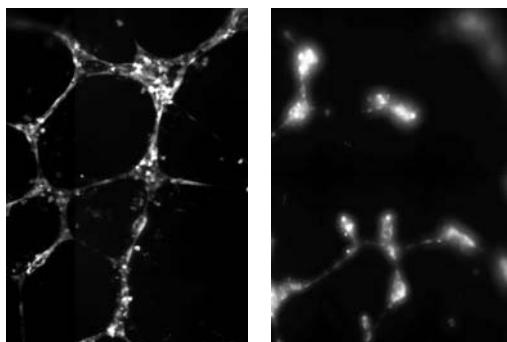
### GREEN FLUORESCENT HUVEC FOR ANGIOGENESIS ASSAYS



<b>Product Name:</b>	TTFLUOR HUVEC
<b>Catalog Number:</b>	P20201
<b>Cell Type:</b>	Primary Human Umbilical Vein Endothelial Cells
<b>Fluorescent Protein:</b>	turboGFP (Evrogen)
<b>Format:</b>	> 1 x 10 <sup>6</sup> cells in Cryopreserved vials
<b>Storage:</b>	Liquid Nitrogen

TTFLUOR HUVEC are Green fluorescent primary HUVEC cells which has been developed through transient transfection with tGFP expresion vector expressing the green fluorescent protein gene sequences as free cytoplasmatic protein.

TTFLUOR HUVEC are intended to be used in cell-based assay applications providing consistent levels of tGFP expression during two passages, which helps to simplify the interpretation of results. Endothelial cells processes as tube formation, can be study in vitro using TTFLUOR HUVEC cells following our standardized protocols.



**Confocal image of TTFLUOR HUVEC cells tube formation (Left panel). The same cells in presence of an antiangiogenic compound are shown in the right panel)**

#### **About primary HUVEC**

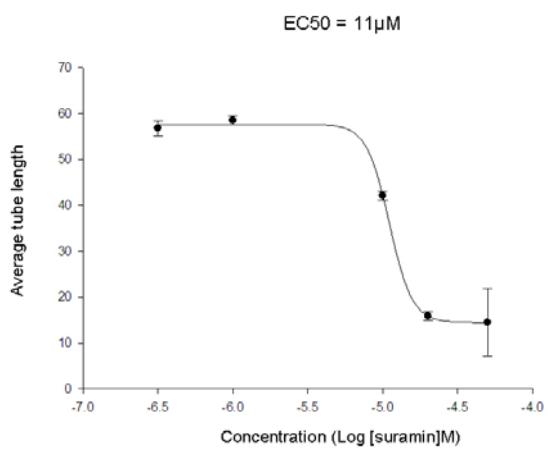
The vascular endothelial cells contribute to the maintenance of vascular homeostasis. They synthesize and secrete activators as well as inhibitors of both the coagulation system and the fibrinolysis system in addition to mediators that influence the adhesion and aggregation of blood platelets. Endothelial cells also release molecules that control cell proliferation and modulate vessel wall tone. Many of the endothelial processes can be studied in vitro using cultured cells, and human umbilical vein endothelial cells (HUVEC) are the most commonly used cell type for such studies. Except for the common endothelial cell features such as "cobblestone" morphology, positive staining for Factors VIII and the ability to take up acetylated low-density lipoprotein, HUVEC stain positively with CD-31.

#### **Use Restriction**

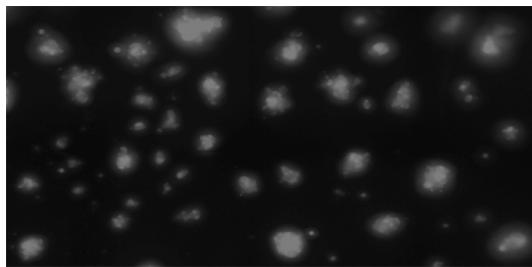
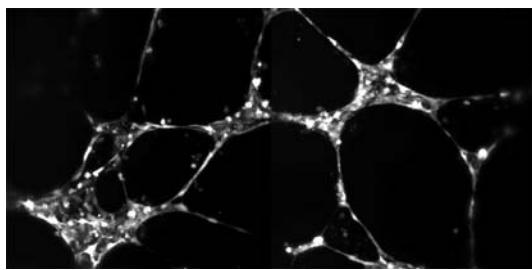
This product contains a proprietary nucleic acid coding for a proprietary fluorescent protein intended to be used for research purposes only. No rights are conveyed to modify or clone the gene encoding fluorescent protein contained in this product, or to use the gene or protein other than for non-commercial research, including use for validation or screening compounds. For information on commercial licensing, contact Licensing Department, Evrogen JSC, email: license@evrogen.com.

 **Sample Assay: Tube Formation**

TTFLUOR HUVEC were assayed for tube formation with increasing concentrations of suramin and quantified using the ATTOVISION software.



**Dose response relationship for antiangiogenic agent suramin**



**Effects of suramin on tube formation:**  
Above, TTFLUOR HUVEC forming an intricate tube- network (above picture) and Suramin complete abrogate the tube network formation (bellow picture).

 **Quality Control**

All cells are performance assayed and test negative for mycoplasma, bacteria, yeast and fungi. Cell viability, morphology and proliferative capacity are measured after recovery from cryopreservation. Innoprot guarantees stable expression for many generations and provides support for cell culture and visualization.