

Materials List for:

Kinetic Analysis of Vasculogenesis Quantifies Dynamics of Vasculogenesis and Angiogenesis *In Vitro*

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Materials

Name	Company	Catalog Number	Comments
100 mm Tissue Culture Plates	Fisher	353003	
15 mL conical tubes	Fisher	1495949B	
Angiogenesis 15-well micro-slides	Ibidi	81506	
Matrigel	Fisher (Corning)	354234	
EGM2 Medium	Lonza	CC3162	
Fetal Bovine Serum	Atlanta Biologicals	S11550	
PSA Antimyocytic, Antibiotic	Fisher	MT30004C1	Added 5 mL per 500 mL bottle of EGM2 medium.
0.5% Trypsin/0.53 nM EDTA in HBSS	Fisher (Corning)	MT25052CI	
Type 1 Collagen	Fisher (Corning)	354226	100 mg of liquid, concentration range 3-4 mg/mL. Dilute in 20 nM acetic acid in ddH ₂ O to use at a final concentration of 0.05 mg/mL.
Glacial Acetic Acid	Fisher	A38-212	Used in Type 1 Collagen solution at a final concentration of 20 nM.
Kim Wipes	Fisher	06-666	
Chambered slide	Ibidi	80296	This slide can be filled with distilled water to maintain humidity in the imaging chamber.
Phosphate Buffered Saline (PBS)	Fisher (Gibco)	20012027	1x solution, pH 7.2
Microscope	Nikon Instruments	MEA53100 and MEF55030	Motorized TiE including Ph1 phase ring for phase contrast with objective
Stage	Prior Instruments	ProScan II	Other OKOlabs and Nikon Elements AR compatible stage may be used
Objective	Nikon Instruments	93178	CFI Plan Fluor DL 10X
Camera	Hamamatsu	C11440-42U	ORCA Flash 4.0LT
Stage Blower	Precision Controls	N/A	This item has been discontinued, alternatives include Smart Air-Therm Heater(AIRTHERM-SMT-1W) from World Precision Instruments

Stage-top Incubator	OKOLabs	H301	BoldLine including a two position slide holder
Computer	Hewlett-Packard	Z620 or equivalent	4 core Intel Xeon processor,>32 GB RAM,>2 TB RAID 10, nVidia Quadro graphics card
Nikon Elements Software	Nikon Instruments	AR v 4.20	ND Acquisition is a multidimensional setup tool used to configure Elements software.
FIJI (ImageJ) Software	N/A	N/A	Free, open-source software downloaded online at the following URL: https://imagej.net/Fiji/Downloads
KAV Plug-In	N/A	N/A	Free, open-source software downloaded online at the following URL: https://github.com/icbm-iupui/kinetic-analysis-vasculogenesis