

Materials List for

# Establishing a Physiologic Human Vascularized Micro-Tumor Model for Cancer Research

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## Materials

Name	Company	Catalog Number	Comments
<b>Fabrication</b>			
(3-Mercaptopropyl)trimethoxysilane, 95%	Sigma-Aldrich	175617-100G	
Greiner Bio-One µClear Bottom 96-well Polystyrene Microplates	Greiner Bio-One	655096	
Methanol ≥99.8% ACS	VWR Chemicals BDH	BDH1135-1LP	
MILTEX Sterile Disposable Biopsy Punch with Plunger, 1mm diameter,	Integra Miltex	33-31AA-P/25	
PDMS membrane	PAX Industries	HT-6240	
Plasma Cleaner PDC-001	Harrick Plasma	N/A	
Smooth-Cast 385	Smooth-On	N/A	
SP Bel-Art Lab Companion Clear Polycarbonate Cabinet Style Vacuum Desiccator	Bel-Art	F42400-4031	
Standard Lids with Condensation Rings, 96-well plate	VWR	82050-827	
SYLGARD 184 Silicone Elastomer Kit (PDMS)	Dow	4019862	
<b>Cell culture/Loading</b>			
BioTek Lionheart FX Automated Microscope	Agilent	CYT5MFAW	
CELLvo Human Endothelial Progenitor Cells	StemBioSys	N/A	
Collagen I, rat tail	Enzo Life Sciences		
Collagenase from <i>Clostridium histolyticum</i> (type 4)	Sigma-Aldrich	C5138	
Corning Hank's Balanced Salt Solution, 1X without calcium and magnesium	Corning	21-021-CV	
Corning DMEM with L-Glutamine, 4.5g/L Glucose and Sodium Pyruvate	Corning	10013CV	
DAPI	Sigma-Aldrich	D9542	

DPBS, no calcium, no magnesium	Gibco	14190144	
EGM-2 Endothelial Cell Growth Medium-2 BulletKit	Lonza	CC-3162	
Fibrinogen from bovine plasma	Neta Scientific	SIAL-341573	
Fibronectin human plasma	Sigma-Aldrich	F0895	
Fluorescein isothiocyanate–dextran (70kDa)	Sigma-Aldrich	FD70S-1G	
Gelatin from porcine skin	Sigma-Aldrich	G1890	
Hyaluronidase from sheep testes (type 4)	Sigma-Aldrich	H6254	
Laminin Mouse Protein	Gibco	23017015	
Leica TCS SP8	Leica	N/A	
MDA-MB-231	ATCC	HTB-26	
NHLF – Normal Human Lung Fibroblasts	Lonza	CC-2512	
Nikon Eclipse Ti	Nikon	N/A	
Paraformaldehyde 4% in 0.1M Phosphate BufferSaline, pH 7.4	Electron Microscopy Sciences	15735-90-1L	
PBMCs - Peripheral blood mononuclear cells	Lonza	CC-2702	
PBS, pH 7.4	Gibco	10010049	
Premium Grade Fetal Bovine Serum (FBS), Heat Inactivated	Avantor Seradigm	97068-091	
ProLong Gold Antifade Mountant	Invitrogen	P10144	
Quick-RNA Microprep Kit	Zymo Research	R1051	
Thrombin from bovine plasma	Sigma-Aldrich	T4648	
Triton X-100 (Electrophoresis),	Fisher BioReagents	BP151-100	
TrypLE Express Enzyme (1X), phenol red	Gibco	12605028	
Trypsin-EDTA (0.05%), phenol red	Gibco	25300062	
Vasculife	Lifeline Cell Technology	LL-0003	