

Materials List for:

# Perfusable Vascular Network with a Tissue Model in a Microfluidic Device

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## Materials

Name	Company	Catalog Number	Comments
AutoCAD 2017	Autodesk	AutoCAD 2017	
A chromium mask coated with AZP 1350.	CLEAN SURFACE TECHNOLOGY	CBL2506Bu-AZP	
Micro pattern generator	Heidelberg	uPG101	
MF CD-26 developer	Rohm and haas electronic materials	-	Developer in protocol 1.4
S-Clean	Sasaki Chemical	S-24	Chromium etchant in protocol 1.5
Aceton	Wako	012-00343	
Silicon Wafer	Canosis	SiJ-4	
Spin Coater	MIKASA	1H-D7	
Hexamethyldisilazane (HMDS)	Tokyo Ohka Kogyo	H0089	
SU-8 3050	MicroChem	-	Negative photoresist in protocol 1.9
UV Exposure	Nanometric Technology Inc	LA310s	
SU-8 Developer	MicroChem	Y020100	Developer for the negative photoresist in protocol 1.13
2-propanol	Wako	163-04841	
Surface profiler	Veeco	Veeco Dektak XT-S	
(Trichloro (1H, 1H, 2H, 2H-perfluorooctyl) silane	Sigma	448931	
Polydimethylsiloxane (PDMS)	Dow Corning Toray	184W/C	
Biopsy Punch (1.0mm)	Kai Industries	BP-10F	
Biopsy Punch (2.0mm)	Kai Industries	BP-20F	
Plasma System	Femto Science	COVANCE	
Cover glass	MATSUNAMI GLASS	C024241	
Culture Dishes	Iwaki	1000-035	
RFP Expressing Human Umbilical Vein Endothelial Cell	Angio Proteomie	cAP-0001RFP	
Normal Human Lung Fibroblasts	Lonza	CC-2512	
Endothelial Cell Growth Medium	Lonza	CC-3162	
Fibroblast Growth Media Kits	Lonza	CC-3132	
DMEM	Thermo Fisher Scientific	11965092	
Fetal Bovine Serum	Thermo Fisher Scientific	26140079	
Penicillin-Streptomycin Solution	Wako	168-23191	

0.05w/v% Trypsin-0.53mmol/l EDTA• 4Na Solution with Phenol Red	Wako	204-16935	
PBS (Phosphate Buffered Salts)	Takara bio	T900	
96-well plate	Sumitomo bakelite	631-21031	
1000ul Chip	NIPPON Genetics	FG-402	
200ul Chip	NIPPON Genetics	FG-301	
10ul Chip	NIPPON Genetics	37650	
CO <sub>2</sub> incubator	Thermo Fisher Scientific	Model 370	
GFP Expressing Human Umbilical Vein Endothelial Cell	Angio Proteomie	cAP-0001GFP	
Fibrinogen from bovine plasma	Sigma	F8630	
Aprotinin from bovine lung	Sigma	A6279	
Collagen I	Corning	354236	
Thrombin from bovine plasma	Sigma	T4648	
Hoechst 33342	Invitrogen	H21492	Fluorescent dye to stain nuclei in protocol 5.5
Paraformaldehyde Solution	Wako	163-25983	
Inverted Fluorescence Microscope	OLYMPUS	IX71	
Digital CCD Camera	OLYMPUS	ORCA-R2	
Confocal Laser Scanning Biological Microscope	OLYMPUS	FV1000	
Inverted Fluorescence Microscope	OLYMPUS	IX-83	
Fluorescein isothiocyanate-dextran	Sigma	FD70S	