

Materials List for

In Vitro Model of Fetal Human Vessel On-chip to Study Developmental Mechanobiology

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jove.com/video/65492

Materials

Name	Company	Catalog Number	Comments
0.6 Luer uncoated slide	ibidi	IB-80186	
25% BSA	Life Technologies	A10008-01	
6-well plates	Greiner Bio-one	657160	
Accutase	Life Technologies	A1110501	Cited as Dissociation reagent
Ascorbic acid	Merck	A4544-100G	
Aspiration pipette	Sardtedt	86.1252.011	
B27 supplement	Life Technologies	17504044	Cited as Neuronal cell culture supplement (50x)
BD FACS DIVA	BD Biosciences	Version 8.0.1	Cited as flow cytometry software
BD LSR Fortessa 5 Laser	BD Biosciences		
bFGF	Life Technologies	PHG0021	
CD34 Microbead kit	Miltenyi Biotec	30-046-702	
CD34 PE clone 4H11	Invitrogen	12-0349-42	
CD34 PerCP-eFluor 710 clone 4H11	Invitrogen	44-0349-42	
Cellstar cell-repellent surface 6-well plates	Greiner Bio-one	657970	Cited as cell-repellent plate
CHIR99021	Cayman Chemicals	13122-1mg-CAY	
Cryostor CS10 cell cryopreservation	Merck	C2874-100ML	Cited as Cryopreservation solution
Dimethyl Sulfoxide	VWR	200-664-3	Cited as DMSO
DMEM/F-12	Life Technologies	10565-018	
DPB Ca ²⁺ Mg ²⁺	Life Technologies	14080055	
DPBS	Life Technologies	14200075	
EASY Strainer 40 µm	Greiner Bio-one	542040	
EDTA	Life technologies	15575020	
FcR Blocking Reagent	Miltenyi Biotec	130-059-901	
Fiji		Version 1.53c	
Flow Jo		Version 10.7.1	Cited as flow cytometry sanalysis ofware

FLT3L	Peprotech	300-19-10uG	
Fluidic unit	ibidi	10903	
GlutaMax	Life Technologies	35050038	Cited as L-glutamine supplement
Ham F-12	Life Technologies	11765054	
Holo-transferrin	Merck	T0665-500MG	
Human Serum Albumin	Fujifilm UK LTD	9988	
ibidi Pump system	ibidi	10902	Cited as Pump system
IMDM	Life Technologies	12440053	
Inverted microscope	ioLight/Thisle Scientific	IOL-IO-INVERT	Cited as inverted in-incubator microscope
Lyophilised BSA	Merck	A2153-100G	
MiniMACS Separator	Miltenyi Biotec	130-042-102	Cited as Magnetic separator
MS Columns	Miltenyi Biotec	130-042-201	Cited as Magnetic column
MTG	Merck	M6145-25ML	
N2 supplement	Life Technologies	17502048	
Notebook for pump system	ibidi	10908	
Paraformaldehyde 37-41%	Fisher Chemicals	F/1501/PB15	
Pastette	Greiner Bio-one	612398	
Pen/Strep	Gibco	15070063	
Perfusion Set YELLOW/GREEN: 50 cm, ID 1.6 mm, 10 mL reservoirs	ibidi	IB-10964	Cited as Perfusion set
Polystyrene Round Bottom Tubes	Falcon	352008	Cited as Flow cytometry tubes
Prism 9		Verison 9.4.0	
Pump control software	ibidi	version 1.6.1	Cited as Pump software
ReLeSR	Stem cell technologies	5872	Cited as Detaching solution
rhBMP4	R&D	314-BP-010	
rhEPO	R&D	287-TC-500	
rhIGF1	Peprotech	100-11-100uG	
rhIL11	Peprotech	200-11-10uG	
rhIL3	Peprotech	200-03-10uG	
rhIL6	R&D	206-IL-010	
rhLaminin-521	Life technologies	A29248	Cited as Laminin
rhSCF	Life Technologies	PHC2111	
rhTPO	R&D	288-TPN-025	
rhVEGF	R&D	293-VE-010	
RLT Lysis Buffer	Qiagen	79216	
Serial Connector for μ -Slides: Sterile, Sterile	ibidi	IB-10830	
StemPro-CD34 SFM media	Life Technologies	10639011	Cited as Serum-Free media for CD34+ cells (SFM-34)
StemPro-CD34 Nutrient Supplement	Life Technologies	10641-025	Cited as 34 nutrient supplement
StemPro hESC SFM	Life Technologies	A1000701	Cited as Culture media
StemPro supplement	Life Technologies	A10006-01	
Vitronectin (VTN-N) recombinant human protein, truncated	Invitrogen	A31804	
Y-27632 dihydrochloride	Tocris	1254	Cited as iRock
β -Mercaptoethanol	Gibco	21985023	