

Materials List for:

In Vivo Study of Human Endothelial-Pericyte Interaction Using the Matrix Gel Plug Assay in Mouse

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Materials

Name	Company	Catalog Number	Comments
PBS (Phosphate buffered saline)	Corning	21-031-CV	
0.25% Trypsin/0.53 mM EDTA	Corning	25-053-CI	
Endothelial Cell Media (ECM) kit	Sciencell	1001	includes media, EC growth supplement, and penicillin/streptomycin, each supplied at the appropriate volume for easy mixing
Pericyte Media (PM) kit	Sciencell	1201	includes media, Pericyte growth supplement, and penicillin/streptomycin, each supplied at the appropriate volume for easy mixing
primary human pulmonary microvascular endothelial cells	Pulmonary Hypertension Breakthrough Initiative		this cell type is also available commercially. Cells used at passage 1-4
primary human pulmonary pericytes	Pulmonary Hypertension Breakthrough Initiative		this cell type is not available commercially, but brain pericytes are. Cells used at passage 1-4
bFGF (basic Fibroblast Growth Factor)	Peprtech	100-18B	stock solution is 50 µg/ml in 0.1% BSA in PBS, aliquots at 50 µl and stored at -20 degrees
Matrigel Basement Membrane Matrix	BD	356237	
28 G 1 cc Insulin Syringe	BD	329410	
SCID (Severe Combined Immune Deficiency) mice	The Jackson Laboratory	5557	NOD.SCID IL2R gamma knockout strain is the best strain; 4-6 weeks of age
1.5 ml microcentrifuge tubes, sterile	Thermo Fisher Scientific	05-408-129	
15 ml screw top tubes, sterile	BD Biosciences	352096	
PAP pen	Life Technologies	8899	
hemocytometer	ThermoFisher Scientific	02-671-6	
Nair hair removal cream	Walmart		
anti-human CD31 primary antibody	LifeSpan Biosciences	LS-B4737	working solution is 1:50
anti-human Smooth Muscle actin CY3 primary fluorescent antibody	Sigma	C6198	working solution is 1:300
goat anti-rabbit secondary antibody; 488/green	ThermoFisher Scientific	A-11008	working solution is 1:250
Prolong Gold DAPI solution	Cell Signaling	8961S	
microscope slides	VWR	48300-047	

no. 1.5 cover slips	Thermo Fisher Scientific	12-544-D	
citrate buffer 10x	Millipore	21545	
extra fine surgical scissors	Fine Science Tools	14084-08	
Formalin (paraformaldehyde)	Thermo Fisher Scientific	245-685	
Tissue cassettes	Simport	M492-12	
goat serum	Dako	X0907	