

Materials List for:

Isolation and Primary Culture of Mouse Aortic Endothelial Cells

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Materials

Name	Company	Catalog Number	Comments
4- or 6-week-old mice	Jackson Laboratory	#000664	
Sterile 1x phosphate-buffered saline (PBS)	Gibco	#10010-023	
Sterile 1x PBS containing 1,000 U/mL of heparin	Sigma Aldrich	H3149	
Endothelial cell growth medium (Dulbeccos' Modified Eagle's Medium [DMEM] with 25 mM HEPES [Gibco, #12320-032], supplemented with 100 µg/mL endothelial cell growth supplement from bovine neural tissue [ECGS, Sigma, #2759], 10% fetal bovine serum [FBS, Gibco, #10082-147], 1,000 U/mL heparin [Sigma Aldrich, H3149], 10,000 U/mL penicillin and 10 mg/mL streptomycin [Gibco, #15140-122])			
Growth factor reduced matrix	BD Biosciences	356231	
Neutral proteinase (Dispase, 1 U/mL, Fisher Scientific, #CB-40235) and D-Val medium (D-Valine, 0.034 g/L, Sigma, #1255), in Dulbeccos' Modified Eagle's Medium, low glucose (Gibco, #12320-032)			
1,1'-dioctadecyl-3,3',3'-tetramethylindo-carbocyanine perchlorate-labeled acetylated LDL (Dil-ac-LDL)	Life Technologies	L3484	
FITC-labeled <i>Ulex europaeus</i> agglutinin (<i>Ulex</i> -Lectin)	Sigma	L9006	
Anti-mouse CD31-FITC conjugated antibody	BD Biosciences	553372	
Anti-mouse vascular endothelial growth factor receptor 2 antibody	Cell Signaling	9698	
Anti-mouse endothelial nitric oxide synthase	Abcam	ab5589	
Anti-mouse vascular endothelium-cadherin	Abcam	33168	
Anti-mouse calponin	Abcam	700	
FITC-conjugated anti-rabbit IgG	Sigma	F6005	
1 mL syringe fitted with 25-G needle	Fisher Scientific	50-900-04222	

100 mm Peri dishes	Fisher Scientific	07-202-516	
Six-well cell culture plates	Fisher Scientific	08-772-1B	
T12.5 culture flask	Fisher Scientific	50-202-076	
Scissors, forceps, microdissection scissors and forceps, Scalpel blade	Fine Science Tools, Inc.		
Anesthesia machine with isoflurane	Webster Veterinary Supply	07-806-3204	
heating lamp			
Centrifuge machine			
Inverted phase-contrast microscope			
inverted fluorescence microscope			