

Materials List for:

Nanopodia - Thin, Fragile Membrane Projections with Roles in Cell Movement and Intercellular Interactions

Chi-Iou Lin¹, Chun-Yee Lau¹, Dan Li¹, Shou-Ching Jaminet¹

¹Center for Vascular Biology Research, Department of Pathology, Beth Israel Deaconess Medical Center, Harvard Medical School

Correspondence to: Shou-Ching Jaminet at sjaminet@bidmc.harvard.edu

URL: <https://www.jove.com/video/51320>

DOI: [doi:10.3791/51320](https://doi.org/10.3791/51320)

Materials

Name	Company	Catalog Number	Comments
Glass disks	Fisher Scientific	12-545-82	12 mm diameter
Glass jar	Fisher Scientific	02-912-310	Certified Clean Clear Glass Straight-Sided Jars, 4 oz
Glass slide	Fisher Scientific	12-544-1	Fisherfinest Premium Plain Glass Microscope Slides
50 ml Falcon tube	BD Falcon	352070	50 ml high-clarity polypropylene conical centrifuge tube, 16,000 rcf rating. Sterile.
15 ml Falcon tube with Styrofoam rack	Corning	430790	Corning 15 ml PP Centrifuge Tubes
Sharp forceps	Fisher Scientific	13-812-42	Dissecting Extra Fine Pointed Splinter Forceps
24-well Cell culture plate	BD Bioscience	353047	24-well Cell Culture Plate
150 mm Cell culture plate	BD Bioscience	353025	150 mm cell culture plate
19 G 1 ½ Syringe needle	BD Bioscience	309635	19 G 1 ½
Ethanol	Decon Laboratories, Inc.	2701	Decon's Pure Ethanol 200 Proof
Collagen solution	BD Bioscience	354249	Collagen I, High Concentration, rat tail, 100 mg
Trypsin/EDTA	Cellgro	25-053-CI	0.25% Trypsin-EDTA 1x
DMEM	Life Technologies	11965-092	DMEM high glucose (1x), liquid, with L-glutamine, without sodium pyruvate
10x PBS	Affymetrix	75889 5 LT	PBS, 10x Solution, pH 7.4
PFA (paraformaldehyde)	Affymetrix	19943 1 LT	4% in PBS
FBS	Sigma-Aldrich	F4135-500ML	Fetal Bovine Serum
EGM2-MV	Lonza	CC-3162	EGM-2 BulletKit, EBM-2 Basal Medium 500 ml and EGM-2 SingleQuot Kit Supplement & Growth Factors
Triton X-100	Sigma-Aldrich	T8787	Triton X-100
NaN ₃	Sigma-Aldrich	S2002-25G	Solubilized in water. 4% stock solution and working concentration is 0.4%.
Mouse anti-human TM4SF1 antibody	Millipore	MAB3127	Epitope is located in extracellular domain
Mouse anti-human CD9 antibody	BD Bioscience	555370	Epitope is located in extracellular domain
Alexa Fluor 488 Donkey anti-mouse 2nd antibody	Life Technologies	A-21202	Alexa Fluor 488 Donkey Anti-Mouse IgG (H+L)
Phalloidin	Chemicon	90324	Rhodamine-conjugated Phalloidin

Anti-fade mounting media	Life Technologies	P-36931	ProLong Gold Antifade Reagent with DAPI
70% Ethanol			17.5 ml of ethanol (200 proof) 7.5 ml of double-deionized water
10x PBS (make 200 ml)			20 ml of 10x PBS 180 ml of double-deionized water
20% Triton X-100 (make 20 ml)			4 ml Triton X-100 16 ml double-deionized water
4% NaN ₃ (make 25 ml)			1 g of NaN ₃ 25 ml of double-deionized water
50 ng/ml Bovine collagen solution in PBS (make 5 ml)			Stock solution of 50 µg/ml (50 ml) 830 µl of Collagen I (3 mg) 50 ml PBS
ICC Blocking Buffer (50 ml)			49 ml PBS 2% FBS (add 1 ml) 0.04% NaN ₃ (add 100 µl of 4% NaN ₃)
ICC Blocking Buffer/0.01% Triton X-100 (make 50 ml)			50 ml of ICC Blocking Buffer 25 µl of 20% Triton X-100
HUVEC	Lonza	C2517A	www.lonza.com
PC3	ATCC	CRL-1435	www.atcc.org
Cell culture hood	NuAIRE	Nu-425-600	NU-425 (Series 60) Biological Safety Cabinet
37 °C, 5% CO ₂ Cell culture incubator	CellStar	QWJ300DABA	Cellstar CO ₂ Water Jacketed Incubator
Heating pad	K&H Manufacturing	1020	K&H LECTRO KENNEL Heated Pad with Free Fleece Cover (www.amazon.com)
Centrifuge	Sorvall	T6000B	Sorvall T6000 (B) Benchtop Centrifuge
Hemocytometer	Sigma-Aldrich	Z359629	Bright-Line Hemocytometer