

Materials List for:

Epicardial Outgrowth Culture Assay and *Ex Vivo* Assessment of Epicardial-derived Cell Migration

Michael A. Trembley^{1,3}, Lissette S. Velasquez¹, Eric M. Small^{1,2,3}

¹Aab Cardiovascular Research Institute, University of Rochester School of Medicine and Dentistry

²Department of Medicine, University of Rochester School of Medicine and Dentistry

³Department of Pharmacology and Physiology, University of Rochester School of Medicine and Dentistry

Correspondence to: Eric M. Small at Eric_Small@urmc.rochester.edu

URL: <https://www.jove.com/video/53750>

DOI: [doi:10.3791/53750](https://doi.org/10.3791/53750)

Materials

Name	Company	Catalog Number	Comments
Dulbecco's Modified Eagle Medium	Hyclone	SH3002201	DMEM
Hanks' Balanced Salt Solution	Hyclone	SH3003102	HBSS
Medium 199	Hyclone	SH3025301	M199
Dulbecco's Phosphate-Buffered Saline	Hyclone	SH3002802	DPBS
Fetal Bovine Serum	Gemini	100-106	FBS
Penicillin/Streptomycin Solution	Hyclone	SV30010	
Corning Biocoat Collagen I, 4-Well Culture Slides	Corning	354557	
Multiwell 24-well plates	Falcon	08-772-1	
Dissecting microscope	Leica	M50	Equipped with Leica KL300 LED light source
Confocal microscope	Olympus	1X81	Equipped with multi-argon laser 405/488/515, FV10-MCPSU laser 405/440/635, 559 laser, and mercury lamp
Bioruptor	Diagenode	UCD-200	
Transforming growth factor beta 1	R&D Systems	100-B-001	TGF-β1
Platelet-derived growth factor BB	R&D Systems	220-BB-010	PDGF-BB
Trizol Reagent	Applied Biosystems	15596-026	Caution, hazardous material
TURBO DNA-free Kit	Life Technologies	AM1907	DNaseI
iScript cDNA Synthesis Kit	BioRad	1708891	
UltraPure Glycogen	Life Technologies	10814-010	
SYBR Green	BioRad	170-8880	
Protease inhibitor cocktail tablets	Roche	11836170001	
Alexa Goat-anti-rabbit 488	Life Technologies	A11008	Secondary antibody
Alexa Goat anti-rabbit 594	Life Technologies	A-11012	Secondary antibody
Alexa Goat anti-mouse 594	Life Technologies	A-11005	Secondary antibody
Mouse anti-smooth muscle alpha actin, Cy3-conjugated	Sigma-Aldrich	C6198	monoclonal antibody, clone 1A4
Mouse anti-Wilms tumor 1 (WT1)	Life Technologies	MA1-46028	monoclonal antibody, clone 6F-H2
Rabbit anti-ZO1	Life Technologies	40-2200	polyclonal antibody
Rabbit anti-Collagen Type 4	Millipore	AB756P	polyclonal antibody
4',6-Diamidino-2-Phenylindole, Dihydrochloride	Life Technologies	D1306	DAPI

Fluorescent mounting medium	DAKO	S3023	
16% Paraformaldehyde solution	Electron Microscopy Sciences	15710	PFA diluted to 4% in DPBS. Caution, hazardous material
Sucrose	Sigma-Aldrich	S0389	
Tissue Freezing Medium	Triangle Biomedical Sciences	TFM-B	
Pap pen	DAKO	S2002	
Disposable microtome blades	Sakura Finetek	4689	
Microscope slides	Globe Scientific	1358W	positively charged, 25 mm x 75 mm x 1 mm
Cryostat	Leica	CM1950	
Forceps	Fine Science Tools	11295-00	
Surgical Scissors	Fine Science Tools	91460-11	
Disposable base molds	Fisher Scientific	22-363-553	
Ketamine	Hospira	NDC 0409-2051-05	
Xylazine	Akorn	NADA 139-236	