

Materials List for:

# Right Ventricular Systolic Pressure Measurements in Combination with Harvest of Lung and Immune Tissue Samples in Mice

Wen-Chi Chen<sup>\*1</sup>, Sung-Hyun Park<sup>\*1</sup>, Carol Hoffman<sup>1</sup>, Cecil Philip<sup>1</sup>, Linda Robinson<sup>2</sup>, James West<sup>2</sup>, Gabriele Grunig<sup>1,3</sup>

<sup>1</sup>Department of Environmental Medicine, New York University School of Medicine, Tuxedo

<sup>2</sup>Division of Allergy, Pulmonary, & Critical Care Medicine, Department of Medicine, Vanderbilt University Medical Center

<sup>3</sup>Division of Pulmonary Medicine, New York University School of Medicine

\*These authors contributed equally

Correspondence to: Gabriele Grunig at [gabriele.grunig@nyumc.org](mailto:gabriele.grunig@nyumc.org)

URL: <https://www.jove.com/video/50023>

DOI: [doi:10.3791/50023](https://doi.org/10.3791/50023)

## Materials

Name	Company	Catalog Number	Comments
<b>Reagents</b>			
2-Methyl-2-butanol	Sigma-Aldrich	152463	
2,2,2-Tribrom-ethanol	Sigma-Aldrich	T48402	
disinfectant soap (Coverage Spray TB plus Steris)	Fisher Scientific	1629-08	
Ethyl Alcohol, 200 Proof, Absolute, Anhydrous ACS/USP Grade	PHARMCO-AAPER	111000200	Dilute to 70 % with distilled water
Formaldehyde solution	Sigma-Aldrich	F1635-500ML	Dilute to a 7-10 % formaldehyde concentration at a PBS concentration of 1x using PBS stock solution and water
Hanks solution, no calcium, magnesium	Fisher Scientific	21-022-CV	
O.C.T	Tissue-Tek	4583	
Penicillin (10,000 U/ml) / Streptomycin (10,000 mg/ml) solution	Thermo Scientific	SV30010	
Phosphate buffered saline (PBS), no calcium, no magnesium, 1x and 10x solutions	Fisher Scientific		
Sodium pentobarbital 26%	Fort Dodge Animal Health	NDC 0856-0471-01	
<b>Labware</b>			
Plates 12, 24, 96 well	Falcon		
Transfer Pipet	Fisher Scientific	13-711-9BM	
Tube, EDTA coated	Sarstedt	2013-08	
Tubes 0.65 ml and 1.7 ml micro-centrifuge	VWR		
Tubes 12 x 75 mm polypropylene	Fisher Scientific	14-956-1D	
Tubes, various sizes, polypropylene	Fisher Scientific		
<b>Instruments</b>			
Forceps, Dumon #5 Fine	Fine Science Tools	11254-20	
Forceps, extra fine graefe -0.5 mm tips curved	Fine Science Tools	11152-10	
Forceps, extra fine graefe -0.5 mm tips straight	Fine Science Tools	11150-10	

Cannula 18 ga, 19 ga	BD	Precision Glide Needles	Cut to optimal length, blunted and outside rasped to create a rough outside surface.
Scissors, Dissector scissors-slim blades 9 cm	Fine Science Tools	14081-09	
Suture for BAL, braided silk suture, 4-0	Fine Science Tools	SP116	
Suture for right heart catheterization, braided silk suture, 6-0	Teleflex medical	18020-60	
Syringe, 1 ml	BD	309659	
<b>Equipment</b>			
Amplifier, PowerLab 4/30	ADInstrument	Model ML866	
Catheter, pressure F1.4	Millar Instruments, Inc	840-6719	
Dissecting Microscope	Variscope		
Forceps, Vannas spring scissors-2 mm blades	Fine Science Tools	15000-00	
Halogen Illuminated Desk Magnifier	Fisher Scientific	11-990-56	
Laptop computer	Asus	Model number A52F i5 processor; 15 inch	
Light Source	Amscope	HL-250-A	
Pressure Control Unit	Millar Instruments, Inc	PCU-2000	
Software, Labchart-Pro V.7	AD Instruments		