

Materials List for:

Isolation of Pulmonary Artery Smooth Muscle Cells from Neonatal Mice

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Materials

Name	Company	Catalog Number	Comments
Bard Parker surgical blade handle	BD	371030	
Stainless steel surgical blades #10 (sterile)	Miltex	4-310	
Syringes (3 ml and 5 ml, sterile)	BD	309657 and 306646	
Needles (27 G, sterile)	BD	305109	
Angiocatheter (24 G, sterile)	BD	381412	
Monoject blunt cannula (15 G)	Kendall	SWD202314Z	
Sutures	Fisher Scientific	NC9782896	
Dynal magnet particle collector	Invitrogen	120-01D	This is a critical tool for the protocol.
Tissue culture plates (35 mm, 60 mm, and 10 cm, sterile)	BD	353001, 353004, and 353003	Any brand of tissue culture plates will be fine.
Iris Scissors (4 ½ inch stainless steel)	American Diagnostic Corporation	3424	
Forceps (4 inch stainless steel)	Quick Medical	L5-5004	
D-PBS	Mediatech	21-031-CV	
M199 media	Mediatech	10-060-CV	
Penicillin/streptomycin	VWR	TX16777-164NWU	
Fetal bovine serum	Hyclone/Thermo Scientific	SH3091003	Heat inactivate at 55 °C for 45 min. For consistency in results, lot match all serum and obtain from same vendor.
Iron particles (iron (II, III) oxide powder)	Aldrich Chemical Company	#31,006-9	
Agarose	Sigma	A9539	
Collagenase (made to 80 U/ml)	Sigma	C5138	
Isoflurane	Butlet Schein	NDC 11695-6776-1	
Nikon Eclipse TE2000-U with a Cascade Photometrics 12-bit camera	Nikon	TE2000-U	Any good light microscope will be fine to observe PASMCM in culture.
Anti-desmin antibody	Sigma	D-8281	Use at 1:200 dilution for immunostaining.
Anti-smooth muscle myosin	Biomedical Technologies	BT-562	Use at 1:2,000 dilution for immunostaining.
Rhodamine-red anti-rabbit secondary	Molecular Probes/Invitrogen	R-6394	Use at 1:200 dilution for immunostaining.
Nikon Eclipse TE-300 fluorescent microscope and Cool Snap digital camera	Nikon	TE300	Any good epifluorescence microscope will be fine for immunostaining.

Cyclic nucleotide phosphodiesterase assay kit	Enzo Life Sciences	BML-AK800-0001	This is the only colorimetric PDE enzyme activity assay available.
Sildenafil	Sigma	PZ-0003	A PDE5-selective inhibitor is required for the PDE enzyme activity to determine specificity of cGMP hydrolysis.