

Materials List for

Isolation of Cardiac and Vascular Smooth Muscle Cells from Adult, Juvenile, Larval and Embryonic Zebrafish for Electrophysiological Studies

Soma S. Singareddy¹, Conor McClenaghan¹, Helen I. Roessler², Robert Tryon¹, Colin G. Nichols¹

¹Department of Cell Biology and Physiology and Center for the Investigation of Membrane Excitability Diseases, Washington University in St. Louis

²Department of Genetics, Center for Molecular Medicine, University Medical Center Utrecht, Utrecht University

Corresponding Author

Colin G. Nichols

cnichols@wustl.edu

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Materials

Name	Company	Catalog Number	Comments
1.5 mL Centrifuge Tubes	Eppendorf	22364111	
10 mL Syringe	Fisher Scientific	14-955-459	
19 Gauge Needle	BD	305187	
2,3-Butanedione Monoxime (BDM)	Sigma-Aldrich	B0753	
5 mL Centrifuge Tubes	Sigma-Aldrich	EP0030119479	For embryonic heart isolation
Axopatch 200B amplifier and Digidata 1200 digitizer	Molecular Devices		Used for action potential recordings
Benchtop Mini Centrifuge	Southern Labware	MLX-106	
Blebbistatin	Sigma-Aldrich	203390	
Bovine Serum Albumin (BSA)	Sigma-Aldrich	A9418	
Calcium Chloride	Sigma-Aldrich	C4901	
Cell-Strainer Sieve	Cole-Parmer	EW-06336-71	100 µm sieve for embryonic heart isolation
Collagenase Type H	Sigma-Aldrich	C8051	
Collagenase Type II	Worthington	LS004176	
Collagenase Type IV	Worthington	LS004188	
Curved Forceps	Fisher Scientific	16-100-110	
DTT	Sigma-Aldrich	D0632	
EGTA	Sigma-Aldrich	324626	
Elastase	Worthington	LS003118	
Fetal Bovine Serum (FBS)	Sigma-Aldrich	F2442	
Fine Forceps	Dumont	Style #5	Ceramic-coated forceps for adult and juvenile CV tissue isolation (Need two)
Glucose	Sigma-Aldrich	G8270	

HEPES	Sigma-Aldrich	H3375	
Insulin	Sigma-Aldrich	I2643	
K2ATP	Sigma-Aldrich	A8937	
Large Petri Dish	Sigma-Aldrich	P5981	For dissociation
Magnesium Chloride	Sigma-Aldrich	M8266	
Micro-Hematocrit Capillary Tubes	Kimble Chase	41A2502	Soda lime glass for patch pipettes
Papain	Worthington	LS003118	
Pasteur Pipettes	Fisher Scientific	13-678-6A	
Petri Dish	Sigma-Aldrich	P5606	100 mm x 20 mm, for embryonic heart isolation
Phosphate-Buffered Saline (PBS)	Sigma-Aldrich	806552	
Potassium Chloride	Sigma-Aldrich	P3911	
Scissors	Fine Science Tools	14090-09	For adult and juvenile zebrafish decapitation
Sodium Chloride	Sigma-Aldrich	S9888	
Sodium Hydroxide	Sigma-Aldrich	S8045	
Super Fine Forceps	Dumont	Style #SF	For isolating larval CV tissues (Need two)
Taurine	Sigma-Aldrich	T0625	
Thermoshaker	ThermoFisher Scientific	13687711	
Tricaine Methanesulfonate (MS222)			For anaesthetizing zebrafish larvae
Trypsin Inhibitor	Sigma-Aldrich	T6522	