

Materials List for

Measurement of Heart Contractility in Isolated Adult Human Primary Cardiomyocytes

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jove.com/video/64394

Materials

Name	Company	Catalog Number	Comments
100–1000 µL Filtered, Wide Orifice, Sterile tips	Pipette	UF-1000W	
100 mL, Duran pressure plus bottles	DWK Life Sciences	218102406	
1 L, 0.22 µm Vacuum Filter system	VWR	567-0020	
290 mmol/kg Osmolarity Standard	Wescor	OA-029	
Benchtop pH Meter	Mettler Toledo		https://www.mt.com/us/en/home/products/Laboratory_Analytics_Browse/pH-meter/pH-meters.html
Calcium Chloride dihydrate (CaCl ₂)	Sigma-Aldrich	C3881	
Camera	Optronis GmbH	Cyclone-25-150-M	https://optronis.com/en/products/cyclone-25-150/
Corning 25 mm x25 mm Square #1 Cover Glass	Corning	2845-25	
Cyclone-25-150	Optronis		https://optronis.com/en/products/cyclone-25-150/
D-(+)-Glucose	Sigma-Aldrich	G8270	
Digital Timer/Stopwatch	Fisher Scientific	14-649-17	
Dimethyl sulfoxide (DMSO)	Sigma-Aldrich	D8418	
Eight-well rectangular polystyrene sterile culture plate	Thermo Fisher Scientific	73521-426	https://us.vwr.com/store/product/4679368/nunclontm-delta-rectangular-dishes-polystyrene-sterile-thermo-scientific
FHD Microscope Chamber System	IonOptix		
Flow EZ, Modular pressure-based flow controller with a computer driven program version 1.1.0.0.	Fluigent OxyGEN		
Heavy Duty Vacuum Bottles	VWR	16211-080	
HEPES	Sigma-Aldrich	H3375	
Human Recombinant Laminin 521	BioLamina	LM521-05	
Ilex Chromatography Tubing, Natural FEP, 1/16" OD x 0.030" ID	Cole-Palmer	1520L	

Kimberly-Clark Professional Kimtech Science Kimwipes	Fisher Scientific	06-666	
L-(-)-Malic acid	Sigma-Aldrich	112577	
Lactobionic acid	Sigma-Aldrich	153516	
L-Glutamic acid	Sigma-Aldrich	49449	
L-Histidine	Sigma-Aldrich	H8000	
Magnesium Chloride hexahydrate (MgCl ₂)	Sigma-Aldrich	M9272	
Microscope Temperature Control Stage Warmer	AmScope	TCS-100	
MyoPacer Field Stimulator	IonOptix		
Nunc Rectangular Dishes	Thermo Scientific	267062	
Olympus IX83P1ZF Ixplorer Standard microscope	Olympus		https://www.olympus-lifescience.com/en/microscopes/inverted/ixplorer-standard/?campaignid=657680540&adgroupid=116963199831&keyword=ix73%20microscope&gclid=EA1aIQobChMIIqjyiMWP-AIVVx-tBh2JoQ85EAA YASAAEgLP3fD_BwE
pH 4.01, 7.00, and 10.01 Standards	Oakton	WD-05942-10	
Potassium Chloride (KCl)	Sigma-Aldrich	746436	
Potassium Hydroxide (KOH)	Sigma-Aldrich	P4494	
Potassium phosphate monobasic (KH ₂ PO ₄)	Sigma-Aldrich	795488	
Prism Software	GraphPad Software - Dotmatics		https://www.graphpad.com/
RBS 25 Liquid Detergent	Sigma-Aldrich	83460	
Sharps Container	Uline	S-15307	
SigmaPlot analysis software	Systat Software Inc.		https://systatsoftware.com/
Sodium Chloride (NaCl)	Sigma-Aldrich	S3014	
Sodium Hydroxide (NaOH)	Sigma-Aldrich	221465	
Student Dumont #5 Forceps	Fine Science Tools	91150-20	
Sucrose	Sigma-Aldrich	S7903	
Taurine	Sigma-Aldrich	T0625	
Temperature Control Box	Warner Instruments	TC-324C	
Vapor Pressure Osmometer	ELITechGroup	Model 5600	
Wheaton 20 mL Vials	DWK Life Sciences	225288	