

Materials List for:

Isolation and Functional Characterization of Human Ventricular Cardiomyocytes from Fresh Surgical Samples

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Materials

Name	Company	Catalog Number	Comments
Potassium phosphate monobasic (KH ₂ PO ₄)	Sigma-Aldrich	P9791	
Magnesium sulfate heptahydrate(MgSO ₄ *7H ₂ O)	Sigma-Aldrich	M1880	
HEPES	Sigma-Aldrich	H3375	
Adenosine	Sigma-Aldrich	A9251	
D-(+)-Glucose	Sigma-Aldrich	G8270	
Mannitol	Sigma-Aldrich	M4125	
Taurine	Sigma-Aldrich	T0625	
Potassium hydroxide (KOH)	Sigma-Aldrich	P5958	
Sodium chloride (NaCl)	Sigma-Aldrich	S7653	
Potassium chloride (KCl)	Sigma-Aldrich	P9333	
Sodium phosphate dibasic (Na ₂ HPO ₄)	Sigma-Aldrich	S7907	
Sodium bicarbonate (NaHCO ₃)	Sigma-Aldrich	S6297	
Potassium bicarbonate (KHCO ₃)	Sigma-Aldrich	237205	
Sodium pyruvate	Sigma-Aldrich	P2256	
2,3-Butanedione monoxime	Sigma-Aldrich	B0753	
Sodium hydroxide(NaOH)	Sigma-Aldrich	S8045	
L-Glutamic acid monopotassium salt monohydrate	Sigma-Aldrich	49601	
Pyruvic acid	Sigma-Aldrich	107360	
3-Hydroxybutyric acid	Sigma-Aldrich	166898	
Adenosine 5'-triphosphate dipotassium salt dihydrate (K ₂ -ATP)	Sigma-Aldrich	A8937	
Creatine	Sigma-Aldrich	C0780	
Succinic Acid	Sigma-Aldrich	S3674	
Ethylene glycol-bis(2-aminoethylether)-N,N,N',N'-tetraacetic acid (EGTA)	Sigma-Aldrich	E0396	
Albumin from bovine serum	Sigma-Aldrich	A0281	
Magnesium chloride (MgCl ₂)	Sigma-Aldrich	M8266	
Collagenase from Clostridium histolyticum, Type V	Sigma-Aldrich	C9263	

Proteinase, Bacterial, Type XXIV	Sigma-Aldrich	P8038	
Calcium chloride solution, ~1 M in H ₂ O	Sigma-Aldrich	21115	
Calcium chloride 0.1 M solution	Sigma-Aldrich	53704	
Potassium methanesulfonate	Sigma-Aldrich	83000	
FluoForte Reagent	Enzo Life Sciences	ENZ-52015	
Powerload concentrate, 100X	Life Technologies	P10020	
Perfusion Fast-Step System	Warner Instruments	VC-77SP	
Amphotericin B solubilized	Sigma-Aldrich	A9528	
Multiclamp 700B patch-clamp amplifier	Molecular Devices		
Digidata 1440A	Molecular Devices		
pClamp10.0	Molecular Devices		
Digestion Device	CUSTOM	CUSTOM	The device is custom made in our laboratory using plastic tubes, cast Sylgard and a motor; it is described in detail in Figure 1C-1D and in Figure 7. We can provide further details if requested.
Silicone elastomer for the digestion device's brushes	Dow Corning	SYLGARD® 184	
Variable speed rotating motor for the digestion device	Crouzet	Crouzet 178-4765	
Mold for brushes casting	N.A.	N.A.	The mold is custom made from standard PTFE 2.5 cm diameter rods.