

Materials List for:

Preparation of Acute Myocardial Tissue Slices from Biopsies of Human Neonates and Infants with Congenital Heart Disease for Physiological Measurements

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Materials

Name	Company	Catalog Number	Comments
NaCl	Carl-Roth	HN00.2	solution A: 136 mmol/L in aqua dest.
KCl	Merck	1.04936.0500	solution A: 5.4 mmol/L
NaH ₂ PO ₄ * 2 H ₂ O	Carl-Roth	T879.1	solution A: 0.33 mmol/L
MgCl ₂ * 6 H ₂ O	Merck	1.05833.0250	solution A: 1 mmol/L
D(+)-glucose	Carl-Roth	HN06.3	solution A: 10 mmol/L
HEPES	Carl-Roth	HN77.3	solution A: 5 mmol/L
2,3-Butanedione monoxime	Sigma-Aldrich	B0753	solution A: 30 mmol/L
NaOH	Carl-Roth	K021.1	solution A: use to adjust pH to 7.4
CaCl ₂ * 2 H ₂ O	Merck	1.02382.0250	calcium solution: 100 mmol/L in aqua dest.
Agarose Low Melt	Carl-Roth	6351.5	for slicing
Steel blades	Campden Instruments	7550-1-SS	for slicing
Vibratome	Leica	VT1000 S	for slicing
Glass pasteur pipettes	VWR	14673-010	for 'slice collector' tool
Peleus ball	VWR	612-2699	for 'Slice collector' tool
steel chamber	custom-made		for embedding tissue into agarose; cylindric shape (inner: Ø: 1.5 cm, depth 0.9 cm; outer: Ø: 2.0 cm, depth 1.1 cm)
instant adhesive	Henkel AG	PSG2C	Pattex Ultra Gel; for slicing
Jacketed vessel	custom-made		to maintain temperature of agarose in beaker at 37°C; made of steel with a plexiglass bottom
Water bath	Grant	Sub 14	for temperature control of jacketed vessel
Water pump	Aquarium Systems	Mini Jet MN404	for temperature control of jacketed vessel
IMDM	Life Technologies	31980022	for force measurements
DMEM, high glucose	Life Technologies	61965026	for microelectrode recordings
E4031 dihydrochloride	Abcam	ab120158	for microelectrode recordings