

Materials List for:

Isolation of Human Ventricular Cardiomyocytes from Vibratome-Cut Myocardial Slices

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Materials

Name	Company	Catalog Number	Comments
Chemicals			
2,3-butanedionemonoxime	Carl Roth	3494.1	Purity>99%
Bovine serum albumin	Carl Roth	163.2	
CaCl ₂	Carl Roth	5239.2	
Creatine monohydrate	Alfa Aesar	B250009	
Glucose	Merck	50-99-7	
HEPES	Carl Roth	9105.3	
KCl	Carl Roth	P017.1	
KH ₂ PO ₄	Carl Roth	3904.2	
L-glutamic acid	Fluka Biochemica	49450	
Low melting-point agarose	Carl Roth	6351.5	
MgCl ₂ x 6H ₂ O	Carl Roth	A537.1	
MgSO ₄	Sigma Aldrich	M-7506	
NaCl	Carl Roth	9265.1	
NaHCO ₃	Carl Roth	8551.2	
Paraformaldehyde	Sigma Aldrich	P6148	
Taurine	Sigma Aldrich	T8691	
Dyes			
Di-8-ANEPPS	Thermo Fisher Scientific	D3167	
Fluo-4 AM	Thermo Fisher Scientific	F14201	
FluoVolt	Thermo Fisher Scientific	F10488	
Enzymes			
Collagenase CLS type I	Worthington	LS004196	Used for human tissue at 4 mg/mL (activity: 280 U/mg)
Collagenase CLS type II	Worthington	LS004176	Used for rat tissue at 1.5 mg/mL (activity 330 U/mg)
Protease XIV	Sigma Aldrich	P8038	Used for rat tissue at 0.5 mg/mL (activity ≥ 3.5 U/mg)
Proteinase XXIV	Sigma Aldrich	P5147	Used for human tissue at 0.5 mg/mL (activity: 7-14 U/mg)
Material			
Cell analyzer (LSR Fortessa)	BD Bioscience	649225	
Centrifuge tube, 15 mL	Corning	430790	

Centrifuge tube, 50 mL	Corning	430829	
Compact shaker	Edmund Bühler	KS-15 B control	Agitation direction: horizontal
Disposable plastic pasteur-pipettes	Carl Roth	EA65.1	For cell trituration use only pipettes with an inner tip diameter ≥ 2 mm
Forceps	FST	11271-30	
Heatblock	VWR	BARN88880030	
Nylon net filter, 180 μ m	Merck	NY8H04700	
TC Dish 100, Standard	Sarstedt	83.3902	
TC Dish 35, Standard	Sarstedt	83.3900	
TC Dish 60, Standard	Sarstedt	83.3901	
Vibratome (VT1200S)	Leica	1491200S001	Includes VibroCheck for infrared-assisted correction of z-deflection