

Materials List for:

Pluripotent Stem Cell Derived Cardiac Cells for Myocardial Repair

Wuqiang Zhu¹, Ling Gao¹, Jianyi Zhang¹

¹Department of Biomedical Engineering, School of Medicine, School of Engineering, University of Alabama at Birmingham

Correspondence to: Jianyi Zhang at jayzhang@uab.edu

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Materials

Name	Company	Catalog Number	Comments
Protocol Section 1			
mTeSR1 medium	Stem cell technologies	5850	
Growth-factor-reduced matrigel	Corning lifescience	356231	
Y-27632	Stem cell technologies	72304	
B27 supplement, serum free	Fisher Scientific	17504044	
RPMI1640	Fisher Scientific	11875-119	
Activin A	R&D	338-AC-010	
BMP-4	R&D	314-BP-010	
bFGF	R&D	232-FA-025	
Collagenase IV	Fisher Scientific	NC0217889	
Hanks Balanced Salt Solution (Dextrose, KCl, KH ₂ PO ₄ , NaHCO ₃ , NaCl, Na ₂ HPO ₄ anhydrous)	Fisher Scientific	14175079	
Fetal Bovine Serum	Fisher Scientific	10438018	
6-well plate	Corning Lifescience	356721	
10 cm dish	Corning Lifescience	354732	
Cell incubator	Panasonic	MCO-18AC	
Protocol Section 2			
Versene	Fisher Scientific	15040066	
Fibrinogen	Sigma-Aldrich	F8630-5g	
Thrombin	Sigma-Aldrich	T7009-1KU	
EMB2 medium	Lonza	CC-3156	
VEGF	ProSpec-Tany	CYT-241	
EPO	Life Technologies	PHC9431	
TGF-β	Peprtech	100-21C	
EGM2-MV medium	Lonza	CC-4147	
SB-431542	Selleckchem	S1067	
CD31	BD Bioscience	BDB555445	
CD144	BD Bioscience	560411	
15 ml centrifuge tube	Fisher Scientific	12565269	
Eppendorff Centrifuge	Eppendorf	5702R	
Protocol Section 3			
CHIR99021	Stem cell technologies	720542	
PDGF-β	Prospec	CYT-501-10ug	
Protocol Section 4			
Olive oil	Sigma-Aldrich	O1514	

Gelatin	Sigma-Aldrich	G9391	
Acetone	Sigma-Aldrich	179124	
Ethanol	Fisher Scientific	BP2818100	
Glutaraldehyde	Sigma-Aldrich	G5882	
Glycine	Sigma-Aldrich	G8898	
IGF	R&D	291-G1-01M	
Bovine serum albumin	Fisher Scientific	15561020	
Heating plate	Fisher Scientific	SP88850200	
Water bath	Fisher Scientific	15-462-10Q	
Protocol Section 5			
CaCl ₂	Sigma-Aldrich	223506	
ε-aminocaproic acid	Sigma-Aldrich	A0420000	
MEM medium	Fisher Scientific	12561-056	
Syringe	Fisher Scientific	1482748	
Anesthesia ventilator	Datex-Ohmeda	47810	
Anesthesia ventilator	Ohio Medical	V5A	
Defibrillator	Physiol Control	LIFEPAK 15	
1.5 T MRI	General Electric	Signa Horizon LX	
7 T MRI	Siemens	10018532	
Gadolinium Contrast Medium (Magnevist)	Berlex	50419-188-02	
2-0 silk suture	Ethilon	685H	
3-0 silk suture	Ethilon	622H	
3-0 monofilament suture	Ethilon	627H	