

Materials List for:

Simultaneous Electrical and Mechanical Stimulation to Enhance Cells' Cardiomyogenic Potential

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Materials

Name	Company	Catalog Number	Comments
Stimulator			
nickel plated neodymium magnets	Supermagnete	Q-10-10-05-N	
nickel-plated neodymium magnets	Supermagnete	Q-06-04-02-HN	
polydimethylsiloxane (PDMS) SYLGAR 184 Silicone Elastomer Kit	Dow Corning Corp	184	
ruled diffraction grating (1250 grooves/mm)	Newport	05RG150-1250-2	
Motor controller	Faulhaber	MCLM-3006-S	
Labview	National Instruments		
Cell culture			
phosphate-buffered saline (PBS)	Gibco	70013-065	
0.05% trypsin-EDTA	Gibco	25300-120	
35 mm cell culture dish	BD Falcon	45353001	
fetal bovine serum (FBS)	Gibco	10270-106	
L-Glutamine 200 mM, 100x	Gibco	25030-024	
Penicilina/Streptomycine, 10.000 U/ mL	Gibco	15140-122	
Minimum essential medium eagle (alfa-MEM)	Sigma	M4526-24x500ML	
Protein & RNA analyses			
protease inhibitor cocktail	Sigma	P8340	
QIAzol Lysis Reagent	Qiagen	79306	
AllPrep RNA/Protein Kit	Qiagen	50980404	
Rneasy mini kit	Qiagen	74104	
iTaq Universal Probes One-Step Kit	Bio-Rad Laboratories	172-5140	
Random hexamers	Qiagen	79236	
TaqMan PreAmp MasterMix 2X	Applied Biosystems	4391128	
TaqMan Universal PCR MasterMix	Applied Biosystems	4324018	
Immunostaining			
10% formalin	Sigma	HT-501128-4L	

horse serum	Sigma	H1138	
Triton X-100	Sigma	X100-500ML	
Bovine Serum Albumina (BSA)	Sigma	A7906-100G	
PARAFILM	Sigma	P6543	
4',6-diamidino-2-phenylindole (DAPI)	Sigma	D9542	
Phalloidin Alexa 568	Invitrogen	A12380	
sodium azide	Sigma	S8032-100g	
Hoechst 33342	Sigma	14533	
Connexin-43 rabbit primary antibody	Sigma	C6219 lot#061M4823	
sarcomeric α -actinin mouse primary antibody	Sigma	A7811 lot#080M4864	
GATA-4 goat primary antibody	R&D	AF2606 VAZ0515101	
MEF2 rabbit primary antibody	Santa Cruz	sc-313 lot#E0611	
SERCA2 goat primary antibody	Santa Cruz	sc-8095 lot#D2709	
Cy3 secondary antibody	Jackson ImmunoResearch	711-165-152	
Cy3 secondary antibody	Jackson ImmunoResearch	715-165-151	
Cy3 secondary antibody	Jackson ImmunoResearch	712-165-150	
Cy2 secondary antibody	Jackson ImmunoResearch	715-225-150	
Cy2 secondary antibody	Jackson ImmunoResearch	711-225-152	
Cy2 secondary antibody	Jackson ImmunoResearch	705-225-147	