

Materials List for:

Isolation, Characterization, and Differentiation of Cardiac Stem Cells from the Adult Mouse Heart

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Materials

Name	Company	Catalog Number	Comments
Mice	The Jackson laboratory, USA	Stock no. 000664	
Antibodies:			
OCT4-	Abcam	ab18976 (rabbit polyclonal)	OCT4-Primary antibody- 1:100 dilution, Secundar antibody- 1:200 dilution, in blocking solution
SOX2	Abcam	ab97959 (rabbit polyclonal)	SOX2-Primary antibody- 1:100 dilution, Secundar antibody- 1:200 dilution, in blocking solution
Nanog	Abcam	ab80892 (rabbit polyclonal)	Nanog-Primary antibody- 1:100 dilution, Secundar antibody- 1:200 dilution, in blocking solution
Ki67	Abcam	ab16667 (rabbit polyclonal)	Ki67-Primary antibody- 1:100 dilution, Secundar antibody- 1:200 dilution, in blocking solution
Sca I	Millipore	AB4336 (rabbit polyclonal)	Sca I Primary antibody- 1:100 dilution, Secundar antibody- 1:200 dilution, in blocking solution
NKX2-5	Santa Cruz	sc-8697 (goat polyclonal)	NKX2-5-Primary antibody- 1:50 dilution, Secundar antibody- 1:200 dilution, in blocking solution
GATA4	Abcam	ab84593 (rabbit polyclonal)	GATA4-Primary antibody- 1:100 dilution, Secundar antibody- 1:200 dilution, in blocking solution
MEF2C	Santa Cruz	sc-13268 (goat polyclonal)	MEF2C-Primary antibody- 1:50 dilution, Secundar antibody- 1:200 dilution, in blocking solution
Troponin I	Millipore	MAB1691 (mouse monoclonal)	Troponin I-Primary antibody- 1:100 dilution, Secundar antibody- 1:200 dilution, in blocking solution
Actinin	Millipore	MAB1682 (mouse monoclonal)	Actinin-Primary antibody- 1:100 dilution, Secundar antibody- 1:200 dilution, in blocking solution
ANP	Millipore	AB5490 (mouse polyclonal)	ANP-Primary antibody- 1:100 dilution, Secundar antibody- 1:200 dilution, in blocking solution
Alex Fluor-488 chicken anti-rabbit	Life technology	Ref no. A21441	
Alex Fluor-594 goat anti-rabbit	Life technology	Ref no. A11012	
Alex Fluor-594 rabbit anti-goat	Life technology	Ref no. A11078	
Alex Fluor-488 chicken anti-mouse	Life technology	Ref no. A21200	
Alex Fluor-594 chicken anti-goat	Life technology	Ref no. A21468	

Name	Company	Catalog Number	Comments
Culture medium:			
CSC maintenance medium	Millipore	SCM101	Note: For CSC culture, PBS or incomplete DMEM medium was used for washing the cells
cardiomyocytes differentiation medium	Millipore	SCM102	
DMEM	Sigma-Aldrich	D5546	
Name			
Company			
Catalog Number			
Comments			
Cell Isolation buffer:			
polysucrose and sodium diatrizoate solution (Histopaque1077)	Sigma	10771	
HBSS	Gibco	2018-03	
Collagenase I	Sigma	C0130	
Dispase solution	STEMCELL Technologies	7913	
PBS	LONZA	S1226	
StemPro Accutase Cell Dissociation Reagent	Thermoscientific	A1110501	
Other reagents:			
BSA	Sigma	A7030	
Normal chicken serum	Vector laboratory	S3000	
DAPI solution	Appllichem	A100,0010	Dapi, working concentration-1 µg/mL
Trypan blue	Biorad	145-0013	
Trypsin	Sigma	T4049	
StemPro Accutase Cell Dissociation Reagent	Thermo Fisher Scientific	A1110501	
Formaldehyde	Sigma	158127	
Triton X-100	ACROS	Cas No. 900-293-1	
Tween 20	Fisher Scientific	Lot No. 160170	
Ethanol	Thermo Scientific		
Name			
Company			
Catalog Number			
Comments			
Tissue culture materials:			
100 mm petri dish	Thermo Scientific		
6-well plate	Thermo Scientific		
24-well plate	Thermo Scientific		
T-25 flask	Thermo Scientific		
T-75 flask	Thermo Scientific		
15 ml conical tube	Thermo Scientific		
50 mL conical tube	Thermo Scientific		
40 µm cell stainer	Fisher Scientific	22363547	
100 µm cell stainer	Fisher Scientific	22363549	
0.22 µm filter	Fisher Scientific	09-719C	
10 mL syringe	BD	Ref no. 309604	
10 µL, 200 µL, 1000 µL pipette tips	Fisher Scientific		
5 mL, 10mL, 25 mL disposable plastic pipette	Thermo Scientific		
Name			
Company			
Catalog Number			
Comments			

Instruments			
Centrifuge machine	Thermo Scientific	LEGEND X1R centrifuge	
EVOS microscope	Life technology		
Automated cell counter	Biorad		
Cell counting slide	Biorad	145-0011	
Pipette aid	Thermo Scientific	S1 pipet filler	
Name	Company	Catalog Number	Comments
Surgical Instruments:			
Surgical scissors	Fine Scientific Tool		
Fine surgical scissors	Fine Scientific Tool		
Curve shank forceps	Fine Scientific Tool		
Surgical blade	Fine Scientific Tool		