

Materials List for:

Isolation and Characterization of Adult Cardiac Fibroblasts and Myofibroblasts

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URL: <https://www.jove.com/video/60909>

DOI: [doi:10.3791/60909](https://doi.org/10.3791/60909)

Materials

Name	Company	Catalog Number	Comments
Reagents			
Acetone			
Anti-fungal (Amphotericin B-solubilized; Fungizone)	Sigma Aldrich	A9528	
Bovine Serum Albumin (BSA)	Sigma	9048-46-8	
Calcium chloride			
Citrate Buffer			
Collagenase blend (Liberase Blendzyme 3 TH)	Roche Applied Science		
DAPI			
DDI water			
DI water			
DMEM-F12 with L-Glutamine and HEPES	Life technologies	11330057	
Dnase I(20U/mL)	BioRad	7326828	
Dulbecco's Phosphate-Buffered Saline (dPBS) without Ca ²⁺ and Mg ²⁺	Gibco	13190-144	
70% Ethanol			
FC Blocker (Purified anti-mouse CD16/CD32)	Tonbo Biosciences	70-0161	
Fetal Bovine Serum (FBS)	Life technologies	16000044	
10% goat serum			
Hank's Balanced Salt Solution (HBSS) with Ca ²⁺ and Mg ²⁺	Corning	21-023-CV	
1M HEPES	Corning	25-060-Ci	
Krebs-Henseleit Buffer powder	Sigma	K3753	
Mycoplasma prophylactic (Plasmocin)	Invivogen	ant-mpp	
Penicillin/Streptomycin	Thermo Fisher Scientific	15140122	
1x Phosphate-Buffered Saline (PBS)			
10x Red Blood Cell Lysis Buffer	Miltenyi	130-094-183	
Slow-fade Mounting Media			
Sodium azide			
Sodium bicarbonate			

TGFβ			
Trypan Blue Stain (0.4%)	Gibco	15250-061	
Type 1 Rat Collagen			
Antibodies			
7AAD (stock: 1 mg/mL solution in DMSO)	Molecular Probes	A1310	dilution = 1:1000; RRID =
CD45-APC	BD Bioscience	559864	dilution = 1:200; RRID = AB_398672
CD31-PE	BD Bioscience	553373	dilution = 1:200; RRID = AB_394819
CD31	BD Biosciences	553370	dilution = 1:250; RRID = AB_394816
CD45	BD Biosciences	553076	dilution = 1:250; RRID = AB_394606
COL 1α1	MD Bioproducts	203002	dilution = 1:1000; RRID =
Ghost dye violet 510 (Formulation: 1 uL/test in DMSO)	Tonbo Biosciences	13-0870	dilution = 1:1000; RRID =
Goat anti-mouse Alexa Fluor 488	Molecular Probes	A11029	dilution = 1:200; RRID = AB_138404
Goat anti-rabbit-Cy3	Southern Biotech	4050-02	dilution = 1:200; RRID = AB_2795952
Goat anti-rabbit-FITC	Jackson Immunoresearch Laboratories	711-165-152	dilution = 1:200; RRID = AB_2307443
Goat anti-rat Alexa Fluor 488	Molecular Probes	A11006	dilution = 1:200; RRID = AB_2534074
Goat anti-rat Alexa Fluor 647	Thermo-Fisher	A21247	dilution = 1:200; RRID = AB_141778
Periostin	Santa Cruz	SC67233	dilution = 1:100; RRID = AB_2166650
Vimentin	Sigma Aldrich	V2258	dilution = 1:200; RRID = AB_261856
α-smooth muscle actin (αSMA)	Sigma Aldrich	A2547	dilution = 1:1000; RRID = AB_476701
Fibroblast specific protein 1 (FSP1)	Millipore 07-2274	07-2274	dilution = 1:100; RRID = AB_10807552
CD45 Magnetic Beads	Miltenyi Biotec	130-052-301	
CD31 Magnetic Beads	Miltenyi Biotec	130-087-418	
Anti-feeder cells-APC (MEFSK4)	Miltenyi Biotec	130-102-900	dilution = 1:100; RRID = AB_2660619
anti-APC Beads	Miltenyi Biotec	130-090-855	
Rat IgG-APC	Miltenyi Biotec	130-103-034	dilution = 1:100; RRID = AB_2661598
Donkey anti-rat Alexa Fluor405	Abcam	ab175670	dilution = 1:100
anti-AN2/NG2	Miltenyi Biotec	130-097-455	dilution = 1:11; RRID = AB_2651235
Other Materials			
0.22 μm Filter	Thermo Scientific	723-2520	
10 cm ² Cell Culture Dish	Corning	430167	
10 mL Pipet	Fisherbrand	13-678-11E	
40 μm Cell Strainer	Fisherbrand	22363547	
5 mL Pipet	Fisherbrand	13-678-11D	
50 mL Conical Tube	Falcon	352070	

6-well Plate	Corning	3506	
Flow Cytometry Tubes	Falcon	352058	
Forceps			
Rocker			
Single Edge Blade	PAL	62-0177	
Surgical Scissors			
GFP- α SMA Reporter Mice			
MACS Separator Magnetic Field			
MACS Separation Column			
Coverslips			
Qiagen Rneasy Mini Kit	Qiagen	74104	
Ambion RNAqueous Micro Total Isolation Kit	Ambion	AM1931	
BioRad iScript cDNA Syntehsis Kit	BioRad	1708891	
48-well Plate			
30G Needle			
3 Laser Flow Cytometry Machine (BD LSRFortessa)	BD Biosciences		
4 Laser Flow Cytometry Machine (BD FACSAria III)	BD Biosciences		
Flow Data Acquiring Software (BD FACSDiva Software v8.0a)	BD Biosciences		
Flow Data Analysis Software (FlowJo Software)	BD Biosciences		