Table 1. Cell labeling

Markers	Function	Antibody
1. CSC epitopes		
c-kit	Stem cell factor	conjugated primary Ab
	receptor	
MDR1	ABC cassette	conjugated primary Ab
	transporter	
Sca-1	Adhesion molecule	conjugated primary Ab
2. Transcription factors	of cardiac cell lineages	
GATA-4	Differentiation of	conjugated primary Ab
	cardiac cells	
MEF2C	Differentiation of	conjugated primary Ab
	cardiomyocytes	
GATA-5	Regulator of Nkx2.5	conjugated primary Ab
GATA-6	Differentiation of	conjugated primary Ab
	VSMCs	
Ets1	Differentiation of ECs	conjugated primary Ab
3. Structural proteins of	Cardiac cell lineages	I
Nestin	Intermediate filament	primary/secondary Ab
	of immature cells	
Desmin	Intermediate filament	primary/secondary Ab
	of muscle cells	
α-sarcomeric actin	Contractile protein of	primary/secondary Ab
	cardiomyocytes	
Cardiac myosin	Contractile protein of	primary/secondary Ab
	cardiomyocytes	
Connexin 43	Electrical coupling	primary/secondary Ab
N-cadherin	Mechanical coupling	primary/secondary Ab
α-SM actin	Contractile protein of	primary/secondary Ab
	VSMCs	
TGFβ1 receptor	VSMC receptor	primary/secondary Ab
flk1	VEGF2 receptor in	primary/secondary Ab
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ECs Von Willebrand Factor VIII receptor in ECs	Markers	Function	Antibody		
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marker	CD8	T lymphocyte subset	conjugated primary Ab		
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Markers	Function	Antibody		
CD20	B lymphocyte marker	conjugated primary Ab		
TER-119	Erythroid marker	conjugated primary Ab		
8. Neural cell markers				
MAP1b	N-specific	conjugated primary Ab		
	microtubule protein			
NF200	neurofilament protein	conjugated primary Ab		
GFAP	mature glial marker	conjugated primary Ab		
9. Skeletal muscle markers				
MyoD	SKMC differentiation	conjugated primary Ab		
Myogenin	SKMC differentiation	conjugated primary Ab		
Myf5	SKMC differentiation	conjugated primary Ab		

CSC, cardiac stem cell; VSMC, vascular smooth muscle cell; EC, endothelial cell; Fs: fibroblasts; ECM, extracellular matrix; HSC, hematopoietic stem cell; N, neuron; SKMC, skeletal muscle cell; Ab, antibody.

Sources of antibodies: AG Scientific (San Diego), α_2 -laminin; Cedarlane Laboratories, Sca-1; Chemicon, MDR1, and cardiac myosin; DAKO, c-kit, CD45, CD45RO, and CD8; Developmental Studies Hybridoma Bank, nestin; Pharmingen, α_4 -integrin, β_1 -integrin, and TER-119; Roche, BrdU; Santa Cruz Biotechnology, GATA-4, MEF2C, GATA-5, GATA-6, Ets1, N-cadherin, TGF β 1 receptor, flk1, connexin 45, E-cadherin, laminin-8/9, laminin-10/11, fibronectin, MCM5, Numb, adaptin, GATA-1, GATA-2, CD34, CD20, MyoD, myogenin, and Myf5; Sigma, desmin, α -sarcomeric actin, connexin 43, α -smooth muscle actin, von Willebrand factor, vimentin, MAP1b, NF200, and GFAP; Upstate Biotechnology (Lake Placid, NY), phosphohistone-H3.