

**Table S2. Primary and Secondary Antibodies**

Type	Antibody	Application	Dilution	Species	Manufacturer And Catalog Number
Primary	Anti-OCT4	Immunofluorescence	1:100	Rabbit Polyclonal	Santa Cruz sc-9081
	Anti-TRA-1-81	Immunofluorescence	1:100	Mouse Monoclonal	Santa Cruz sc-21706
	Anti-MLC2v	Immunofluorescence	1:50	Rabbit Polyclonal	Proteintech 10906-1-AP
	Anti- <i>CSRP3</i>	Western blot	1:1000	Mouse Monoclonal	Santa Cruz sc-166930
	Anti-MLC2a	Immunofluorescence	1:100	Mouse Monoclonal	Santa Cruz sc-365255
	Anti- $\alpha$ -actinin	Immunofluorescence	1:100	Rabbit Polyclonal	Abcam Ab137346
		Western blot	1:1000		
	Anti-cTnT	Immunofluorescence	1:100	Mouse Monoclonal	Abcam Ab8295
		Western blot	1:1000		
		Flow cytometry	1:200		
	Anti-SERCA 2	Western blot	1:1000	Rabbit Monoclonal	Cell signaling #9580
	Anti-AMPK	Western blot	1:1000	Rabbit Polyclonal	Abcam Ab39400
	Anti-Calcineurin	Western blot	1:1000	Rabbit Polyclonal	Cell signaling #2614
	Anti-Phospho -CaMKII	Western blot	1:1000	Rabbit Monoclonal	Cell signaling #12716
Anti-CaMKII	Western blot	1:1000	Rabbit Monoclonal	Abcam Ab52476	
Anti-MYH7	Western blot	1:1000	Mouse Monoclonal	Abcam Ab 174640	
Anti-GAPDH	Western blot	1:1000	Mouse Monoclonal	Santa Cruz sc-365062	
	Goat anti-Mouse IgG Alexa Fluor 594	Immunofluorescence	1:200	Goat anti-Mouse IgG	Invitrogen A21145
	Goat anti-Rabbit IgG Alexa Fluor 488	Immunofluorescence	1:200	Goat anti-Rabbit IgG	Invitrogen A32731
	Chicken anti-Rabbit IgG	Immunofluorescence	1:200	Chicken anti-Rabbit IgG	Invitrogen A21442

Secondary	Alexa Fluor 594				
	Chicken anti-Mouse IgG Alexa Fluor 488	Immunofluorescence	1:200	Chicken anti-Mouse IgG	Invitrogen A21200
	Goat anti-Rabbit IgG (H + L) IRDye 800CW	Western blot	1:20000	Goat anti-Rabbit IgG	LI-COR 926-32211
	Goat anti-Mouse IgG (H + L) IRDye 800CW	Western blot	1:20000	Goat anti-Mouse IgG	LI-COR 926-32210