

Major Resources Table

In order to allow validation and replication of experiments, all essential research materials listed in the Methods should be included in the Major Resources Table below. Authors are encouraged to use public repositories for protocols, data, code, and other materials and provide persistent identifiers and/or links to repositories when available. Authors may add or delete rows as needed.

Antibodies

Target antigen	Vendor or Source	Catalog #	Working concentration	Lot # (preferred but not required)	Persistent ID / URL
Troponin T	Abcam	ab45932	1/100 or 1/200		https://www.abcam.com/cardiac-troponin-t-antibody-ab45932.html
EEA1	Cell signaling Technology	#2411	1/100 or 1/200		https://www.cellsignal.de/products/primary-antibodies/eea1-antibody/2411
MLC-2A	SYSY	311011AT1	1/100		https://sysy.com/product/311011AT1
sarcomeric alpha actinin	Sigma	A7811	1/100 or 1/200		https://www.sigmaaldrich.com/DE/en/product/sigma/a7811
PI(4,5)P2	Echelon Biosciences	Z-P045	1/100		https://www.echelon-inc.com/product/purified-anti-ptdins-45p2-igm/
MYBPC3	Abcam	ab108522	1/100		https://www.abcam.com/mybpc3-antibody-epr30082-ab108522.html
Vinculin	Sigma	V9131	1/100 or 1/200		https://www.sigmaaldrich.com/DE/en/product/sigma/v9131
Transferrin Receptor	DSHB	G1/22/12-s	1/200		https://dshb.biology.uiowa.edu/G1-221-12
LDLR	NSJ Bioreagents	F51451	1/200		https://www.nsjbio.com/tds/ldlr-antibody-f51451
CCDC53	Protein-tech	24445-1-AP	1/100		https://www.ptglab.com/products/CCDC53-Antibody-24445-1-AP.htm
Anti-Active RhoA	Biomol	NB-26904	1/100		https://www.biomol.com/products/antibodies/primary-antibodies/general/anti-active-rhoa-monoclonal-nb-26904
β-Actin	Santa Cruz	SC-47778	1/200		https://www.scbt.com/p/beta-actin-antibody-c4
AP1B1	Proteintech	16932-1-AP	1/200		https://www.ptglab.com/products/AP1B1-Antibody-16932-1-AP.htm
DNML1	Proteintech	12957-1-AP	1/200		https://www.ptglab.com/products/DNM1L,DLP1-Antibody-12957-1-AP.htm
Apolipoprotein A1	Proteintech	14427-1-AP	1/200		https://www.ptglab.com/products/APOA1-Antibody-14427-1-AP.htm
WASL	Proteintech	14306-1-AP	1/200		https://www.ptglab.com/products/WASL-Antibody-14306-1-AP.htm
Cardiac Troponin C	Santa Cruz	Sc52263	1/200		https://www.scbt.com/p/troponin-c-slow-skeletal-cardiac-antibody-12g3
Troponin T	Invitrogen	13-11	1/100 or 1/200		https://www.thermofisher.com/antibody/product/Cardiac-Troponin-T-Antibody-clone-13-11-Monoclonal/MA5-12960

GAPDH	Santa Cruz	Sc-32233	1/500		https://www.scbt.com/p/gapdh-antibody-6c5
Tom20	Santa Cruz	Sc-11415	1/200		https://www.scbt.com/p/tom20-antibody-fl-145
MYH7	Proteintech	22280-1-AP	1/200		https://www.ptglab.com/products/MYH7-specific-Antibody-22280-1-AP.htm
Sox2	Novus	NB110-37235S	1/100		https://www.novusbio.com/products/sox2-antibody_nb110-37235
Oct-3/4	R&D biosystems	AF1759-SP	1/100		https://www.rndsystems.com/products/human-mouse-oct-3-4-antibody_af1759
SSEA4	R&D systems	MAB1435	1/100		https://www.rndsystems.com/products/human-mouse-ssea-4-antibody-mc-813-70_mab1435
TRA-1-81	Stemgent Pelobiotech	09-0011	1/100 (IF)		https://www.citeab.com/antibodies/3504144-09-0069-stemgent-stainalive-tra-1-81-antibody-dyl
Transferrin Receptor	R and D Systems	AF2474	15-30 µg/mL		https://www.rndsystems.com/products/human-tfr-transferrin-r-antibody_af2474
Alexa Fluor 488 goat anti-mouse IgG	Invitrogen	A-21121	1/400		https://www.thermofisher.com/antibody/product/Goat-anti-Mouse-IgG1-Cross-Adsorbed-Secondary-Antibody-Polyclonal/A-21121
Alexa Fluor 568 goat anti-rabbit IgG	Invitrogen	A-11011	1/40 (IF)		https://www.thermofisher.com/antibody/product/Goat-anti-Rabbit-IgG-H-L-Cross-Adsorbed-Secondary-Antibody-Polyclonal/A-11011
Alexa Fluor 488 rat anti-mouse IgM	Biolegend	406521	1/400		https://www.biolegend.com/nl-be/products/alexa-fluor-488-anti-mouse-igm-9095
Alexa Fluor 568 donkey anti-goat IgG	Invitrogen	A-11057	1/400		https://www.thermofisher.com/antibody/product/Donkey-anti-Goat-IgG-H-L-Cross-Adsorbed-Secondary-Antibody-Polyclonal/A-11057
IRDye® 680RD Goat anti-Mouse IgG	Licor	925-68070	1/10000		https://www.licor.com/bio/reagents/irdye-680rd-goat-anti-mouse-igg-secondary-antibody
IRDye® 680RD Donkey anti-Rabbit	Licor	926-68073	1/10000		https://www.licor.com/bio/reagents/irdye-680rd-donkey-anti-rabbit-igg-secondary-antibody
IRDye® 800CW Donkey anti-Mouse IgG (H+ L)	Licor	925-32212	1/10000		https://www.licor.com/bio/reagents/irdye-800cw-donkey-anti-mouse-igg-secondary-antibody

Data & Code Availability

Description	Source / Repository	Persistent ID / URL
Contractility Measurements	Circ Res. 2018 Feb 2;122(3):e5-e16.	DOI: 10.1161/CIRCRESAHA.117.312067
	Circ Res. 2019 Jun 21;125(1):90-103.	DOI: 10.1161/CIRCRESAHA.118.313973
	Sci Rep. 2020 Jan 14;10(1):209.	DOI: 10.1038/s41598-019-56597-3
Sarcomere length analysis	FEBS Lett. 2021 Oct;595(20):2544-2557.	DOI: 10.1002/1873-3468.14189
Atomic force microscopy (AFM) and contractility measurements	FEBS Lett. 2021 Oct;595(20):2544-2557.	DOI: 10.1002/1873-3468.14189