

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	Persistent ID / URL
alpha-actinin	Sigma	A7811	1:1000	https://www.sigmaaldrich.com/US/en/product/sigma/a7811
cardiac troponin T	Abcam	ab45932	1:500	https://www.abcam.com/cardiac-troponin-t-antibody-ab45932.html
NOTCH1	Cell Signaling Technology	4147	1:1000	https://www.cellsignal.com/products/primary-antibodies/cleaved-notch1-val1744-d3b8-rabbit-mab/4147
Ki67	Abcam	ab15580	1:1000	https://www.abcam.com/ki67-antibody-ab15580.html
Cyclin D1	Cell Signaling Technology,	55506	1:1000	https://www.cellsignal.com/products/primary-antibodies/cyclin-d1-e3p5s-xp-rabbit-mab/55506
MYL2	Abcam	ab79935	1:1000	https://www.abcam.com/myosin-light-chain-2-antibody-ab79935.html
COUP-TFII	R&D Systems	PP-H7147-00	1:1000	https://www.rndsystems.com/products/human-coup-tf-ii-nr2f2-antibody-h7147_pp-h7147-00
Phospho-Rb	Cell Signaling Technology	8516	1:1000	https://www.cellsignal.com/products/primary-antibodies/phospho-rb-ser807-811-d20b12-xp-rabbit-mab/8516
GAPDH	Thermo Fisher Scientific	MA5-15738-HRP	1:1000	https://www.thermofisher.com/antibody/product/GAPDH-Loading-Control-Antibody-clone-GA1R-Monoclonal/MA5-15738-HRP
Nkx2-5	Thermo Fisher Scientific	PA5-49431	1:400	https://www.thermofisher.com/antibody/product/Nkx2-5-Antibody-Polyclonal/PA5-49431
ISL1	Thermo Fisher Scientific	MA5-15515	1:200	https://www.thermofisher.com/antibody/product/ISL1-Antibody-clone-1H9-Monoclonal/MA5-15515
WT1	Proteintech	12609-1-AP	1:200	https://www.ptglab.com/products/WT1-Antibody-12609-1-AP.htm
TBX18	R&D Systems	mab63371	1:200	https://www.rndsystems.com/products/human-tbx18-antibody-635305_mab63371
TBXT	R&D Systems	AF2085	1:200	https://www.rndsystems.com/products/human-mouse-brachyury-antibody_af2085
TBX6	Thermo Fisher Scientific	PA5-35102	1:200	https://www.thermofisher.com/antibody/product/TBX6-Antibody-Polyclonal/PA5-35102
Goat anti-Mouse IgG (H+L), Alexa Fluor 594	Thermo Fisher Scientific	A-11032	1:2000	https://www.thermofisher.com/antibody/product/Goat-anti-Mouse-IgG-H-L-Highly-Cross-Adsorbed-Secondary-Antibody-Polyclonal/A-11032
Goat anti-Mouse IgG (H+L), Alexa Fluor 488	Thermo Fisher Scientific	A-11001	1:2000	https://www.thermofisher.com/antibody/product/Goat-anti-Mouse-IgG-H-L-Cross-Adsorbed-Secondary-Antibody-Polyclonal/A-11001

DOI [to be added]

Goat Anti-Rabbit IgG (H+L), Alexa Fluor 594	Thermo Fisher Scientific	A-11012	1:2000	https://www.thermofisher.com/antibody/product/Goat-anti-Rabbit-IgG-H-L-Cross-Adsorbed-Secondary-Antibody-Polyclonal/A-11012
Donkey anti-Mouse IgG (H+L), Alexa Fluor 594	Thermo Fisher Scientific	R37115	1:2000	https://www.thermofisher.com/antibody/product/Donkey-anti-Mouse-IgG-H-L-Secondary-Antibody-Polyclonal/R37115
Donkey anti-Rabbit IgG (H+L), Alexa Fluor 594	Thermo Fisher Scientific	R37119	1:2000	https://www.thermofisher.com/antibody/product/Donkey-anti-Rabbit-IgG-H-L-Secondary-Antibody-Polyclonal/R37119
Donkey anti-Goat IgG (H+L), Alexa Fluor Plus 488	Thermo Fisher Scientific	A32814	1:2000	https://www.thermofisher.com/antibody/product/Donkey-anti-Goat-IgG-H-L-Highly-Cross-Adsorbed-Secondary-Antibody-Polyclonal/A32814
Rabbit IgG Isotype Control	Abcam	ab172730	Same as primary antibodies	https://www.abcam.com/Rabbit-IgG-monoclonal-EPR25A-Isotype-Control-ab172730.html
Mouse IgG Isotype Control	Abcam	ab37355	Same as primary antibodies	https://www.abcam.com/Mouse-IgG-Isotype-Control-ab37355.html
Goat IgG Isotype Control	Abcam	ab37373	Same as primary antibodies	https://www.abcam.com/Goat-IgG-polyclonal-Isotype-Control-ab37373.html

DNA/cDNA Clones

Clone Name	Sequence	Source / Repository	Persistent ID / URL
PX458	Plasmid	Addgene	48138

Data & Code Availability

Description	Source / Repository	Persistent ID / URL
RNA-seq data	NCBI GEO	GSE195559
Single-cell RNA-seq data	NCBI GEO	GSE196632

Other

Description	Source / Repository	Persistent ID / URL
B27 supplement	Thermo Fisher Scientific	17504044
B27 supplement minus insulin	Thermo Fisher Scientific	A1895601
bFGF	Peprtech	100-18B
CD144 microbeads	Miltenyi Biotec	130-097-857
CHIR99021	Selleck Chemicals	S2924
CytoTune-iPS 2.0 Sendai Reprogramming Kit	Thermo Fisher Scientific	A16517
DAPT	Selleck Chemicals	S2215
EGM-2 medium	Lonza	CC-3162
Essential 8 medium	Thermo Fisher Scientific	A1517001
Gelatin solution, 2% in H2O	Sigma	G1393
Growth factor reduced Matrigel	Corning	356231

DOI [to be added]

IWR-1-endo	Selleck Chemicals	S7086
KnockOut Serum Replacement (KSR)	Thermo Fisher Scientific	10828028
Lipofectamine LTX Reagent with PLUS Reagent	Thermo Fisher Scientific	15338100
MitoTracker Green FM	Thermo Fisher Scientific	M7514
Recombinant human EPO	Thermo Fisher Scientific	PHC9631
Recombinant human FLT3	Thermo Fisher Scientific	PHC9414
Recombinant human IL3	Peprtech	200-03
Recombinant human IL6	Thermo Fisher Scientific	PHC0065
Recombinant human SCF	Thermo Fisher Scientific	300-07
RPMI 1640 medium	Thermo Fisher Scientific	11875093
RPMI 1640 medium, no glucose	Thermo Fisher Scientific	11879020
SB431542	LC laboratories	S-7800
Seahorse XF Cell Mito Stress Test Kit	Agilent	103015-100
SlowFade Gold Antifade Mountant	Thermo Fisher Scientific	S36936
StemPro-34 SFM	Thermo Fisher Scientific	10639011
TrypLE Select Enzyme 10x, no phenol red	Thermo Fisher Scientific	A1217703
UltraPure 0.5 M EDTA	Thermo Fisher Scientific	15575020
VEGF	Peprtech	100-20
Y-27632 2HCl	Selleck Chemicals	S1049