

Major Resources Table

Animals (in vivo studies)

Species	Vendor or Source	Background Strain	Sex	Persistent ID / URL
<i>Hdac3^{fllox/+}</i>	Jackson Laboratory	C57BL/6J	either	Stock #006148
<i>Tnnt2^{nGFP/+}</i>	Dr. Chenleng Cai's lab	C57BL/6J	either	
<i>R26^{eYFP}</i>	Jackson Laboratory	C57BL/6J	either	Stock #006148
<i>Wt1^{CreERT2/+}</i>	Jackson Laboratory	C57BL/6J	either	Stock #010912

Genetically Modified Animals

	Species	Vendor or Source	Background Strain	Other Information	Persistent ID / URL
Parent - Male					
Parent - Female					

Antibodies

Target antigen	Vendor or Source	Catalog #	Working concentration	Lot # (preferred but not required)	Persistent ID / URL
BrdU	eBioscience	14-5071-80	IHC-1:50 (10 ug/mL)	4279854	https://www.thermofisher.com/antibody/product/BrdU-Antibody-clone-BU20A-Monoclonal/14-5071-37
p-H3	Cell Signaling	9701S	IHC-1:20 ICC-1:100 (1 ug/mL)	16	https://www.cellsignal.com/products/primary-antibodies/phospho-histone-h3-ser10-antibody/9701?site-search-type=Products&N=4294956287&Ntt=9701s&fromPage=plp&_requestid=2130723
ACTC1	ARP	03-61075	IHC-1:200 ICC-1:100 (0.0625 ug/mL)	151251A	https://www.arp1.com/anti-cardiac-actin-fetal-a-actin-monoclonal-antibody-03-61075.html
ACTC1	Abcam	Ab46805	IHC-1:200 (1.42 ug/mL)	GR197549-3	https://www.abcam.com/muscle-actin-antibody-ep184e-ab46805.html
WT1	Santa Cruz	sc-7385	IHC-1:50 (4 ug/mL)	E2813	https://datasheets.scbt.com/sc-7385.pdf
GFP	Abcam	ab6673	IHC-1:200 (2.5 ug/mL)	GR202861-3	https://www.abcam.com/gfp-antibody-ab6673.html
HDAC3	Abcam	ab7030	WB-1:1000 IP-5 ug	GR166225-11	https://www.abcam.com/hdac3-antibody-ab7030.html
HDAC3	Santa Cruz	sc-11417	IHC-1:50	D2611	https://www.scbt.com/p/hdac3-antibody-h-99
Rabbit IgG – Isotype control	Abcam	ab37415	IP-5 ug	GR3257876-1	https://www.abcam.com/rabbit-igg-polyclonal-isotype-control-ab37415.html
CD31	Dianova	Dia-310	IHC-1:200		https://www.arp1.com/anti-cd31-monoclonal-antibody-dia-310.html
smMHC1 1	Abcam	Ab683	IHC-1:50 (20 ug/mL)	GR49754-6	https://www.abcam.com/smooth-muscle-myosin-heavy-chain-11-antibody-1g12-ab683.html
Vimentin	Cell Signaling	5741	IHC-1:200 (0.225 ug/mL)	6	https://www.cellsignal.com/products/primary-antibodies/vimentin-d21h3-xp-rabbit-mab/5741
IGF2	Thermo Fisher	PA5-47946	IHC-1:25 WB-1:1000 (20 ug/mL)	VI3076963A	https://www.cellsignal.com/products/primary-antibodies/phospho-histone-h3-ser10-antibody/9701?site-search-type=Products&N=4294956287&Ntt=97

					01s&fromPage=plp&_requestid=2130723
FGF9	Abcam	ab206408	WB-1:10s0	GR284805-2	https://www.abcam.com/fgf9gaf-antibody-epr19937-ab206408.html
FGF9	Santa Cruz	sc-8413	IHC-1:20 (10 ug/mL)	K0419	https://datasheets.scbt.com/sc-8413.pdf
FGFR1	Cell Signaling	9740S	WB-1:1000	4	https://www.cellsignal.com/products/primary-antibodies/phospho-fgf-receptor-1-tyr653-654-d4x3d-rabbit-mab/52928
p-FGFR1 (Tyr653/654)	Cell Signaling	52598S	WB-1:1000	2	https://www.cellsignal.com/products/primary-antibodies/phospho-fgf-receptor-1-tyr653-654-d4x3d-rabbit-mab/52928?site-search-type=Products&N=4294956287&Ntt=p-fgfr1&fromPage=plp
IGFR1	Cell Signaling	3027S	WB-1:1000	16	https://www.cellsignal.com/products/primary-antibodies/igf-i-receptor-b-antibody/3027
p-IGFR1	Sigma	SAB4300069	WB-1:1000	511711088	https://www.sigmaaldrich.com/US/en/product/sigma/sab4300069
ERK	BD Biosciences	610123	WB-1:1000		https://wwwbdbiosciences.com/en-us/products/reagents/microscopy-imaging-reagents/immunofluorescence-reagents/purified-mouse-anti-erk-pan-erk.610123
p-ERK	Cell Signaling	9101	WB-1:1000	30	https://www.cellsignal.com/products/primary-antibodies/phospho-p44-42-mapk-erk1-2-thr202-tyr204-antibody/9101
H3K27Ac	Abcam	ab4729	WB-1:1000 IP-5 ug	GR3303559-1	https://www.abcam.com/histone-h3-acetyl-k27-antibody-chip-grade-ab4729.html
H3	Abcam	ab176842	WB-1:5000	GR3237728-1	https://www.abcam.com/histone-h3-antibody-epr16987-nuclear-marker-and-chip-grade-ab176842.html
SOX17	R&D	AF1924	IHC-1:100 (5 ug/mL)	KGA1021032	https://www.rndsystems.com/products/human-sox17-antibody_af1924
β-actin	Proteintech	HRP-60008	WB-1:10,000		https://www.ptglab.com/products/ACTB-Antibody-HRP-60008.htm
GAPDH	Proteintech	HRP-60004	WB-1:10,000		https://www.ptglab.com/products/GAPDH-Antibody-HRP-60004.htm

DNA/cDNA Clones

Clone Name	Sequence	Source / Repository	Persistent ID / URL
lentiCRISPR v2 vector		Addgene	#52961
PsPAX2		Addgene	#12260
PMD2G		Addgene	#12259
mCherry pCDH		Li lab	
Hdac3 WT-pCDH		Li lab	
Hdac3 Y298H-pCDH		Li lab	
miRZIP-424(322) anti-microRNA construct		System Biosciences	#MZIP424-PA-1
miRZIP-503 anti-microRNA construct		System Biosciences	#MZIP503-PA-1
Empty pGL4.10 TK-Renilla		Promega	
1.5kb miR322/503 promoter pGL4.10 TK-Renilla		Li lab	

Cultured Cells

Name	Vendor or Source	Sex (F, M, or unknown)	Persistent ID / URL
Mouse embryonic epicardial cells (MECs)	Millipore	unknown	#SCC187
Lenti-XTM 293T cells	Takara Bio USA	unknown	#632180

Data & Code Availability

Description	Source / Repository	Persistent ID / URL
RNA sequencing data	NCBI GEO	https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE197297
Non-coding RNA sequencing data	NCBI GEO	https://www.ncbi.nlm.nih.gov/geo/query/acc.cgi?acc=GSE197296

qRT-PCR primers

	Forward	Reverse
<i>Fgf9</i>	GGGGAGCTGTATGGATCAGA	TCCCGTCCTTATTTAATGCAA
<i>Igf2</i>	CGCTTCAGTTTGTCTGTTTCG	GCAGCACTCTTCCACGATG
<i>Snail2</i>	CATTGCCTTGTGTCTGCAAG	CAGTGAGGGCAAGAGAAAGG
<i>Twist1</i>	AGCTACGCCTTCTCCGTCT	TCCTTCTCTGGAAACAATGACA
<i>Gapdh</i>	TCCTGGTATGACAATGAATACGGC	TCTTGCTCAGTGTCTTGTCTGG

ChIP qRT-PCR primers

	Forward	Reverse
miRNA 322/503 promoter	Primer 1	GGATGGTTTTTGTGCTTTCC
	Primer 2	CAACTTAAGGAGTGGGGCTGT
	Primer 3	GCATGGCATCTGCAACATTA
	Gene Desert	CAGCATGAAAATGGAGGTCA
		TAAGCCACGCCA CTGAAAAT
		CAATGAATGCTGGGTCCTTT
		CTCACTCCCTGGGTTTGTGT
		TGAGGGTAAAGGTGCTTGT

Other

Description	Source / Repository	Persistent ID / URL
Tamoxifen	Sigma	#T5648
5-Bromo-2'deoxyuridine	Sigma	#59-14-3
RGFP966	Sigma	#1396841-57-8
Dual-Luciferase® Reporter Assay System	Promega	#E1910
Lipofectamine 2000	Thermo Fischer Scientific	#11668019
Lipofectamine™ RNAiMAX	Thermo Fischer Scientific	#13778150
TaqMan™ MicroRNA Reverse Transcription Kit	Thermo Fischer Scientific	#4366596