

Key resource table

REAGENT or RESOURCE	SOURCE	IDENTIFIER
Antibodies		
Rabbit anti-SERPINE3	Abcam	ab188155 (IF, 1:50; WB, 1:500)
Mouse anti-PMEL	Invitrogen	MA5-16712 (IF, 1:100)
Mouse anti-RPE65	Abcam	Ab231782 (IF, 1:100)
Rabbit anti-ZO1	Invitrogen	WK338145 (IF, 1:100)
Mouse anti-EZRIN	Abcam	Ab4069 (WB, 1:1000)
Rabbit anti-MITF	Sigma	HPA003259 (IF, 1:100)
Mouse anti-MITF	Abcam	Ab12039 (IF, 1:1000)
Rabbit anti-GFP conjugated with Alexa Fluor™ 488	Invitrogen	A-21311 (IF, 1:100)
Rabbit anti-GFP	Abcam	AB290 (WB, 1:1000)
Mouse anti-GFP	Proteintech	66002-1-Ig (1:100)
Mouse anti-4HNE	Proteintech	68538-1-Ig (1:100)
Goat anti-OTX2	R&D	AF1979 (IF, 1:200)
Rabbit anti-IBA1	Wako	019-19741 (IF, 1:300; WB, 1:1000)
Rabbit anti-Caspase1	Cell Signal Technology	24232 (WB, 1:1000)
Rabbit anti-Cleaved-caspase1	Cell Signal Technology	89332 (WB, 1:1000)
Rabbit anti-Myc	Abcam	ab9106 (co-IP, 1:10)
Rabbit anti-Flag	Cell Signal Technology	14793 (IF, 1:100; WB, 1:1000)
Mouse anti-Flag	Sigma	F1804 (IF, 1:100; WB, 1:1000)
Mouse anti-PKCa	Santa Cruz	Sc-8393 (IF, 1:100)
Rabbit anti-Recoverin	Invitrogen	PA5-110287 (IF, 1:300; WB, 1:2000)
Alexa Fluor 594 Phalloidin	Thermofish	A12381 (1:300)
Rabbit anti-HA	Abcam	Ab9110 (co-IP, 1:10)
Rabbit anti-TOMM20	Proteintech	11802-1-AP (1:200)
Rabbit anti-Vimentin	Abcam	AB92547 (1:200)
Mouse anti-Rhodopsin	Abcam	Ab98887 (1:300)
Rabbit anti-SERPINE3	Thermofish	PA5-62514 (1:30)
Plasmids and virus strain		
Caspase 1 (CASP1) (NM_033292) Human Tagged ORF Clone	Origene	RC218364
SERPINE3 (NM_001101320) Human Tagged ORF Clone	Origene	RC225688
pCMV6-Entry, mammalian vector with C-terminal Myc-DDK Tag	Origene	PS100001
AAV5-BEST1-SERPINE3	NEI virus core	N/A
AAV5-BEST1-GFP	NEI virus core	N/A
Lenti-Scramble-GFP	Merck	SHC216V
Lenti-SERPINE3-GFP	Merck	TRCN0000263006
Chemicals, peptides, and recombinant proteins		
Mouse FGF-basic (FGF-2/bFGF) Recombinant Protein	Gbico	450-33-1MG
Recombinant Caspase 1 human	Sigma	C5482-100UN

Recombinant Human Serpin E3(SERPINE3)	Cedarlane	116484
Bovine serum albumin	Sigma-Aldrich	A7906
Paraformaldehyde	Sigma-Aldrich	158127
40,6-diamidino-2-phenylindole (DAPI)	Invitrogen	D1306
Kanamycin Sulfate	ThermoFisher	15160054
DH5 α Competent Cells	ThermoFisher	EC0112
LB medium	KD medical	BLE-3030
Phosphate buffered saline	Sigma	P3812
Pen-strep	life tech	15070063
Hyaluronidase	Sigma	HX0514-1
Bolt™ Bis-Tris Plus Mini Protein Gels, 4-12%, 1.0 mm, WedgeWell™ format	Thermofisher	NW04120BOX
Critical commercial assays		
Unique Dual Index Kit (1–24)	Takara	634756
SMART-Seq® mRNA LP	Takara	634768
NucleoMag® NGS Clean-up and Size Select	Takara	744970.50
Agilent High Sensitivity DNA Kit	Agilent	5067-4626
Caspase-Glo® 1 Inflammasome Assay (10ml)	Promega	G9951
Click-iT™ Plus TUNEL Assay Kits for In Situ Apoptosis Detection	ThermoFisher	C10618
Pierce™ Co-Immunoprecipitation Kit	Thermo Scientific	26149
EdU (5-ethynyl-2'-deoxyuridine)	Thermofish Scientific	A10044
Click-iT™ EdU Cell Proliferation Kit for Imaging, Alexa Fluor™ 594 dye	Thermofish Scientific	C10339
RNAScope-Serpine3 probe	ACD	1287098-C1
TrueBlack	Biotium	23007
Proteinase assay	Reaction biology Corp	N/A
Mutagenesis	LifeSet	N/A
Genotyping	Transnetyx	N/A
Experimental models: Cell lines		
Human embryonic kidney 293 cells (HEK293)	ATCC	CRL-1573
Experimental models: Organisms/strains		
Serpine3-Gfp KI mouse	Genetic Engineering Core, NEI	N/A
Oligonucleotides		
Serpine-LF1	Transnetyx	CACATCCCTGGTAGTCATGGCAGG
Serpine-LR1	Transnetyx	GAAGATGGTGCGCTCCTGGAC
Serpine-RF1	Transnetyx	CGGCCCTAGAGCTCGCTGAT
Serpine-RR1	Transnetyx	CCTGACCAGCTTGGATGTATTCTC
Gfp-F1	Transnetyx	GTACTTCCCCTCCCTCTGAACT
Gfp-R1	Transnetyx	ACCACCCCGGTGAACAG
WT-F2:	Transnetyx	GAAGTGCAGGTGTCCAGTCTCC
WT-R2:	Transnetyx	AGCCACAGGCCTTCACTGA

Serpine3-F1	Life Science	AAGGCCAAGATGGAGCTTTCA
Serpine3-R1	Life Science	TACTGAAGACAAACCCTGTGCT
Actin-F1	Life Science	CACTGTCGAGTCGCGTCC
Actin-R1	Life Science	TCATCCATGGCGAACTGGTG