

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.

Animals (in vivo studies)

Species	Vendor or Source	Background Strain	Sex	Persistent ID / URL
ApoE ^{-/-} mice	Vital River Laboratory Animal Technology	C57BL/6	Male	https://www.vitalriver.com/
C57BL/6N mice	Vital River Laboratory Animal Technology	C57BL/6	Male	https://www.vitalriver.com/

Genetically Modified Animals

	Species	Vendor or Source	Background Strain	Other Information	Persistent ID / URL
Parent - Male	LAMP-2A-deficient mice	Viewsolid Biotech	C57BL/6	generated by Viewsolid Biotech	
Parent - Female					

Antibodies

Target antigen	Vendor or Source	Catalog #	Working concentration	Lot # (preferred but not required)	Persistent ID / URL
MOMA-2	AbD	MCA519G	1:200		https://www.bio-rad-antibodies.com/results/go?w=MOMA2
LAMP-2A	Invitrogen	AMC2	1:200 or 1:1000		https://www.thermofisher.cn/cn/zh/antibody/product/LAMP-2A-Antibody-clone-AMC2-Polyclonal/51-2200
LAMP-2A	Abcam	ab18528	1:200		https://www.abcam.cn/lamp2a-antibody-lysosome-marker-ab18528.html
LAMP-2A	Abcam	Ab125068	1:200 or 1:1000		https://www.abcam.cn/lamp2a-antibody-epr42072-lysosome-marker-ab125068.html
α -SMA	CST	#19245	1:200		https://www.cellsignal.cn/products/primary-antibodies/a-smooth-muscle-actin-d4k9n-xp-rabbit-mab/19245?site-search-type=Products&N=4294956287&Ntt=%2319245&fromPage=plp&_requestid=939425
CD68	OmnimABs	OM245833	1:200		http://www.omnimabs.com/antibody_CD68_antibody_-OM245833.html
F4/80	Abcam	ab16911	1:200		https://www.abcam.cn/f480-antibody-bm8-ab16911.html
LAMP1	Abcam	ab25245	1:200		https://www.abcam.cn/lamp1-antibody-1d4b-ab25245.html
NLRP3	AdipoGen	AG-20B-0014	1:200		https://adipogen.com/catalogsearch/result/?q=AG-20B-0014
LAMP2	Abcam	ab13524	1:1000		https://www.abcam.cn/lamp2-antibody-gl2a7-ab13524.html
LAMP1	CST	#9091	1:1000		https://www.cellsignal.cn/products/primary-antibodies/lamp1-d2d11-xp-rabbit-

DOI [to be added]

					mab/9091?site-search-type=Products&N=4294956287&Ntt=%239091&fromPage=plp&_requestid=941955
NLRP3	AdipoGen	AG-20B-0014	1:200		https://adipogen.com/ag-20b-0014-anti-nlrp3-nalp3-mab-cryo-2.html
NLRP3	Abcam	ab263899	1:1000 or 1:100		https://www.abcam.cn/nlrp3-antibody-epr23094-1-ab263899.html
pro-Caspase-1 + p10 + p12	Abcam	ab179515	1:1000		https://www.abcam.cn/pro-caspase-1--p10--p12-antibody-epr16883-ab179515.html
ASC	CST	#67824	1:1000		https://www.cellsignal.cn/products/primary-antibodies/asc-tms1-d2w8u-rabbit-mab-mouse-specific/67824?site-search-type=Products&N=4294956287&Ntt=%2367824&fromPage=plp&_requestid=942433
IL-1 β (p31)	Abcam	ab234437	1:1000		https://www.abcam.cn/il-1-beta-antibody-epr16805-15-ab234437.html
IL-1 β (p17)	CST	#63124	1:1000		https://www.cellsignal.cn/products/primary-antibodies/cleaved-il-1b-asp117-e7v2a-rabbit-mab-mouse-specific/63124?site-search-type=Products&N=4294956287&Ntt=%2363124&fromPage=plp&_requestid=942785
JNK	CST	#9252	1:1000		https://www.cellsignal.cn/products/primary-antibodies/sapk-jnk-antibody/9252?site-search-type=Products&N=4294956287&Ntt=%239252&fromPage=plp&_requestid=942983
p-JNK	CST	#9251	1:1000		https://www.cellsignal.cn/products/primary-antibodies/phospho-sapk-jnk-thr183-tyr185-antibody/9251?site-search-type=Products&N=4294956287&Ntt=%239251&fromPage=plp&_requestid=943082
p38 MAPK	CST	#8690	1:1000		https://www.cellsignal.cn/products/primary-antibodies/p38-mapk-d13e1-xp-rabbit-mab/8690?site-search-type=Products&N=4294956287&Ntt=%238690&fromPage=plp&_requestid=943149
p-p38 MAPK	CST	#4511	1:1000		https://www.cellsignal.cn/products/primary-antibodies/phospho-p38-mapk-thr180-tyr182-d3f9-xp-rabbit-mab/4511?site-search-type=Products&N=4294956287&Ntt=%234511&fromPage=plp&_requestid=943220
p44/42 MAPK (Erk1/2)	CST	#4695	1:1000		https://www.cellsignal.cn/products/primary-antibodies/p44-42-mapk-erk1-2-137f5-rabbit-mab/4695?site-search-type=Products&N=4294956287&Ntt=%234695&fromPage=plp
p-p44/42 MAPK (Erk1/2)	CST	#4370	1:1000		https://www.cellsignal.cn/products/primary-antibodies/phospho-p44-42-mapk-erk1-2-thr202-tyr204-d13-14-4e-xp-rabbit-mab/4370?site-search-type=Products&N=4294956287&Ntt=%234370&fromPage=plp&_requestid=943472

NF- κ B p65	CST	#8242	1:1000	https://www.cellsignal.cn/products/primary-antibodies/nf-kb-p65-d14e12-xp-rabbit-mab/8242?site-search-type=Products&N=4294956287&Ntt=%238242&fromPage=plp&_requestid=943565
p-NF- κ B p65 (Ser536)	CST	#3033	1:1000	https://www.cellsignal.cn/products/primary-antibodies/phospho-nf-kb-p65-ser536-93h1-rabbit-mab/3033?site-search-type=Products&N=4294956287&Ntt=%233033&fromPage=plp&_requestid=943667
I κ B α	CST	#4812	1:1000	https://www.cellsignal.cn/products/primary-antibodies/ikba-44d4-rabbit-mab/4812?site-search-type=Products&N=4294956287&Ntt=%234812&fromPage=plp&_requestid=943752
p-I κ B α (Ser32)	CST	#2859	1:1000	https://www.cellsignal.cn/products/primary-antibodies/phospho-ikba-ser32-14d4-rabbit-mab/2859?site-search-type=Products&N=4294956287&Ntt=%232859&fromPage=plp&_requestid=943885
Histone H3	CST	#4499	1:1000	https://www.cellsignal.cn/products/primary-antibodies/histone-h3-d1h2-xp-rabbit-mab/4499?site-search-type=Products&N=4294956287&Ntt=%234499&fromPage=plp&_requestid=943941
Perilipin 2	Progen Biotechnik	GP40	1:1000	https://www.progen.com/anti-Perilipin-2-N-terminus-aa-1-29-guinea-pig-polyclonal-serum/GP40
SQSTM1/p62	CST	#39749	1:1000	https://www.cellsignal.cn/products/primary-antibodies/sqstm1-p62-d1q5s-rabbit-mab/39749?site-search-type=Products&N=4294956287&Ntt=%2339749&fromPage=plp&_requestid=945054
LC3B	CST	#43566	1:1000	https://www.cellsignal.cn/products/primary-antibodies/lc3b-e7x4s-xp-rabbit-mab/43566?site-search-type=Products&N=4294956287&Ntt=%2343566&fromPage=plp&_requestid=945221
Atg7	CST	#8558	1:1000	https://www.cellsignal.cn/products/primary-antibodies/atg7-d12b11-rabbit-mab/8558?site-search-type=Products&N=4294956287&Ntt=%238558&fromPage=plp&_requestid=946231
Atg5	CST	#12994	1:1000	https://www.cellsignal.cn/products/primary-antibodies/atg5-d5f5u-rabbit-mab/12994?site-search-type=Products&N=4294956287&Ntt=%2312994&fromPage=plp&_requestid=946348
Beclin-1	CST	#3495	1:1000	https://www.cellsignal.cn/products/primary-antibodies/beclin-1-d40c5-rabbit-mab/3495?site-search-

					type=Products&N=4294956287&Ntt=%233495&fromPage=plp&_requestid=946495
Cathepsin B	Abcam	ab214428	1:1000		https://www.abcam.cn/cathepsin-b-antibody-epr21033-ab214428.html
Cathepsin D	Abcam	ab75852	1:1000		https://www.abcam.cn/cathepsin-d-antibody-epr3057y-ab75852.html
β -actin	CST	#4970	1:1000		https://www.cellsignal.cn/products/primary-antibodies/b-actin-13e5-rabbit-mab/4970?site-search-type=Products&N=4294956287&Ntt=%234970&fromPage=plp&_requestid=946742
HSC70	Abcam	ab51052	1:200		https://www.abcam.cn/hsc70-antibody-ep1531y-ab51052.html
Ubiquitin	CST	#3933	1:200		https://www.cellsignal.cn/products/primary-antibodies/ubiquitin-antibody/3933?site-search-type=Products&N=4294956287&Ntt=3933s&fromPage=plp&_requestid=948947
K48-linkage Specific Polyubiquitin	CST	#8081	1:200		https://www.cellsignal.cn/products/primary-antibodies/k48-linkage-specific-polyubiquitin-d9d5-rabbit-mab/8081?site-search-type=Products&N=4294956287&Ntt=%238081&fromPage=plp&_requestid=949098
K63-linkage Specific Polyubiquitin	CST	#5621	1:200		https://www.cellsignal.cn/products/primary-antibodies/k63-linkage-specific-polyubiquitin-d7a11-rabbit-mab/5621?site-search-type=Products&N=4294956287&Ntt=%235621&fromPage=plp&_requestid=949188
HRP-conjugated goat anti-rabbit IgG	ZSJB-BIO	PV-9001			http://www.zsbio.com/product/PV-9001
HRP-conjugated goat anti-mice IgG	ZSJB-BIO	PV-9002			http://www.zsbio.com/product/PV-9002
HRP-conjugated goat anti-rat IgG	ZSJB-BIO	PV-9004			http://www.zsbio.com/product/PV-9004
Donkey anti-mouse IgG H&L (Alexa Fluor® 594)	Abcam	ab150112	1:1000		https://www.abcam.cn/donkey-mouse-igg-hl-alex-fluor-594-preadsorbed-ab150112.html
Donkey anti-rat IgG H&L (Alexa Fluor® 594)	Abcam	ab150156	1:1000		https://www.abcam.cn/donkey-rat-igg-hl-alex-fluor-594-preadsorbed-ab150156.html
Donkey anti-rabbit IgG H&L (Alexa Fluor® 488)	Abcam	ab150061	1:1000		https://www.abcam.cn/donkey-rabbit-igg-hl-alex-fluor-488-preadsorbed-ab150061.html

HRP-conjugated goat anti-rabbit IgG	ZSJB-BIO	ZB-2301	1:5000		http://www.zsbio.com/product/ZB-2301
HRP-conjugated goat anti-mice IgG	ZSJB-BIO	ZB-2305	1:5000		http://www.zsbio.com/product/ZB-2305
HRP-conjugated goat anti-mice IgG	ZSJB-BIO	ZB-2307	1:5000		http://www.zsbio.com/product/ZB-2307
Goat Anti-Guinea pig IgG	Abcam	ab6908	1:5000		https://www.abcam.cn/goat-guinea-pig-igg-hl-hrp-ab6908.html
Normal rabbit IgG	CST	#2729			https://www.cellsignal.cn/products/primary-antibodies/normal-rabbit-igg/2729?site-search-type=Products&N=4294956287&Ntt=2729&fromPage=plp&_requestid=2746638

DNA/cDNA Clones

Clone Name	Sequence	Source / Repository	Persistent ID / URL

Cultured Cells

Name	Vendor or Source	Sex (F, M, or unknown)	Persistent ID / URL
HEK293T cells	ATCC		https://www.atcc.org/products/acs-4500
Primary peritoneal macrophages	L2A-m \emptyset KO mice or WT C57BL/6 mice	M	

Data & Code Availability

Description	Source / Repository	Persistent ID / URL

Other

Description	Source / Repository	Persistent ID / URL
AEC Peroxidase Substrate Kit	Solarbio	http://www.solarbio.com/goods-1470.html
DAPI	Abcam	https://www.abcam.cn/mounting-medium-with-dapi-aqueous-fluoroshield-ab104139.html
Protein extraction kit	Invent	https://www.inventchina.cn/pro_view.asp?id=85&class=1
Lipofectamine 2000	Thermo Fisher	https://www.thermofisher.cn/order/catalog/product/11668019?SID=srch-srp-11668019#/11668019?SID=srch-srp-11668019

DOI [to be added]

Mouse IL-1 beta/IL-1F2 Quantikine HS ELISA Kit	R&D	https://www.rndsystems.com/cn/products/mouse-il-1-beta-il-1f2-quantikine-elisa-kit_mlb00c
Mouse IL-1 beta/IL-1F2 Quantikine ELISA Kit	R&D	https://www.rndsystems.com/cn/products/mouse-il-1-beta-il-1f2-quantikine-hs-elisa-kit_mhslb00
Mouse IL-18/IL-1F4 ELISA	R&D	https://www.rndsystems.com/cn/products/mouse-il-18-il-1f4-elisa_7625
Mouse TNF-alpha Quantikine HS ELISA Kit	R&D	https://www.rndsystems.com/cn/products/mouse-tnf-alpha-quantikine-hs-elisa-kit_mhsta50
Mouse TNF-alpha Quantikine ELISA Kit	R&D	https://www.rndsystems.com/cn/products/mouse-tnf-alpha-quantikine-elisa-kit_mta00b
LPS	Sigma	https://www.sigmaaldrich.cn/CN/zh/product/sigma/l2880?context=product
ATP	Sigma	https://www.sigmaaldrich.cn/CN/zh/product/sigma/a7699?context=product
Cycloheximide	CST	https://www.cellsignal.cn/products/activators-inhibitors/cycloheximide/2112?site-search-type=Products&N=4294956287&Ntt=chx&fromPage=plp&_requestid=959402
RIPA lysis buffer	Solarbio	http://www.solarbio.com/goods-1164.html
Protease inhibitor cocktail	Solarbio	http://www.solarbio.com/goods-25748.html
Immobilon ECL ultra western HRP substrate	Millipore	https://www.sigmaaldrich.cn/CN/zh/product/mm/wbuls0500?context=product
Immunoprecipitation Kits	Abcam	https://www.abcam.cn/immunoprecipitation-kit-ab206996.html
2x SDS-PAGE loading buffer	Beyotime	https://www.beyotime.com/product/P0015B.htm
LysoSensor™ Yellow/Blue DND-160	Thermo Fisher	https://www.thermofisher.cn/order/catalog/product/L7545?SID=srch-hj-L7545#/L7545?SID=srch-hj-L7545
Micro β -galactosidase assay kit	Solarbio	http://www.solarbio.com/goods-9310.html
Lysosome Isolation Kit	Sigma	https://www.sigmaaldrich.cn/CN/zh/product/sigma/lysiso1?context=product
Bafilomycin A1	APEX BIO	https://www.apexbt.com/bafilomycin-a1.html
Hematoxylin-Eosin/HE Staining Kit	Solarbio	http://www.solarbio.com/goods-1225.html