

## 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
zebrafish	Zebrafish International Resource Center (ZIRC)	WIK	F/M	<a href="http://zfin.org/ZDB-GENO-010531-2">http://zfin.org/ZDB-GENO-010531-2</a>
mice	Beijing SPF Biotechnology Co., Ltd., China	WIK	M	C57BL/6

### Genetically Modified Animals

	Species	Vendor or Source	Background Strain	Other Information	Persistent ID / URL
Parent - Male	zebrafish	in house	Tg( $\beta$ actin2: loxP-mCherry-stop-loxP-atg7-cerulean)		
Parent - Female	zebrafish	ZIRC	Tg(cmlc2:CreER)		<a href="http://zebrafish.org/home/guide.php">http://zebrafish.org/home/guide.php</a>
	zebrafish	ZIRC	atg7 sa10973		<a href="http://zebrafish.org/home/guide.php">http://zebrafish.org/home/guide.php</a>
	zebrafish	A gift from Dr. Klionsky DJ Lab	Tg(LC3-GFP)		

### Antibodies

Target antigen	Vendor or Source	Catalog #	Working concentration	Lot # (preferred but not required)	Persistent ID / URL
LC3	Cell Signaling Technology	12741S	1:3000		<a href="https://www.cellsignal.com/products/primary-antibodies/lc3a-b-d3u4c-xp-rabbit-mab/12741">https://www.cellsignal.com/products/primary-antibodies/lc3a-b-d3u4c-xp-rabbit-mab/12741</a>
Atg7	Cell Signaling Technology	2631	1:1000		<a href="https://www.cellsignal.com/products/primary-antibodies/atg7-antibody/2631">https://www.cellsignal.com/products/primary-antibodies/atg7-antibody/2631</a>
Top2b	Abcam	ab109524	1:10000		<a href="https://www.abcam.cn/topoisomerase-ii-alpha--topoisomerase-ii-betatop2b-antibody-epr5377-ab109524.html">https://www.abcam.cn/topoisomerase-ii-alpha--topoisomerase-ii-betatop2b-antibody-epr5377-ab109524.html</a>
GAPDH	Santa Cruz	sc-25778	1:2000		<a href="https://www.scbt.com/p/gapdh-antibody-fl-335">https://www.scbt.com/p/gapdh-antibody-fl-335</a>
$\beta$ -actin	Sigma	A3854	1:2000		<a href="https://www.sigmaaldrich.com/catalog/product/sigma/a3854?lang=en&amp;region=US">https://www.sigmaaldrich.com/catalog/product/sigma/a3854?lang=en&amp;region=US</a>
$\gamma$ -H2AX	Abcam	ab81299	1:250		<a href="https://www.abcam.cn/gamma-h2ax-phospho-s139-antibody-ep8542y-ab81299.html">https://www.abcam.cn/gamma-h2ax-phospho-s139-antibody-ep8542y-ab81299.html</a>

### DNA/cDNA Clones

Clone Name	Sequence	Source / Repository	Persistent ID / URL

DOI [to be added]

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**Cultured Cells**

Name	Vendor or Source	Sex (F, M, or unknown)	Persistent ID / URL
H9C2	ATCC	unknown	<a href="https://www.atcc.org/products/all/CRL-1446.aspx">https://www.atcc.org/products/all/CRL-1446.aspx</a>
MCF-7	BMCR	unknown	<a href="http://www.cellresource.cn/fdetail.aspx?id=5916">http://www.cellresource.cn/fdetail.aspx?id=5916</a>
U87	BMCR	unknown	<a href="http://m.cellresource.cn/fdetail.aspx?id=4041">http://m.cellresource.cn/fdetail.aspx?id=4041</a>
HepG2	BMCR	unknown	<a href="http://m.cellresource.cn/fdetail.aspx?id=3903">http://m.cellresource.cn/fdetail.aspx?id=3903</a>

**Data & Code Availability**

Description	Source / Repository	Persistent ID / URL

**Other**

Description	Source / Repository	Persistent ID / URL