

Supplemental Material

Supplemental Figures

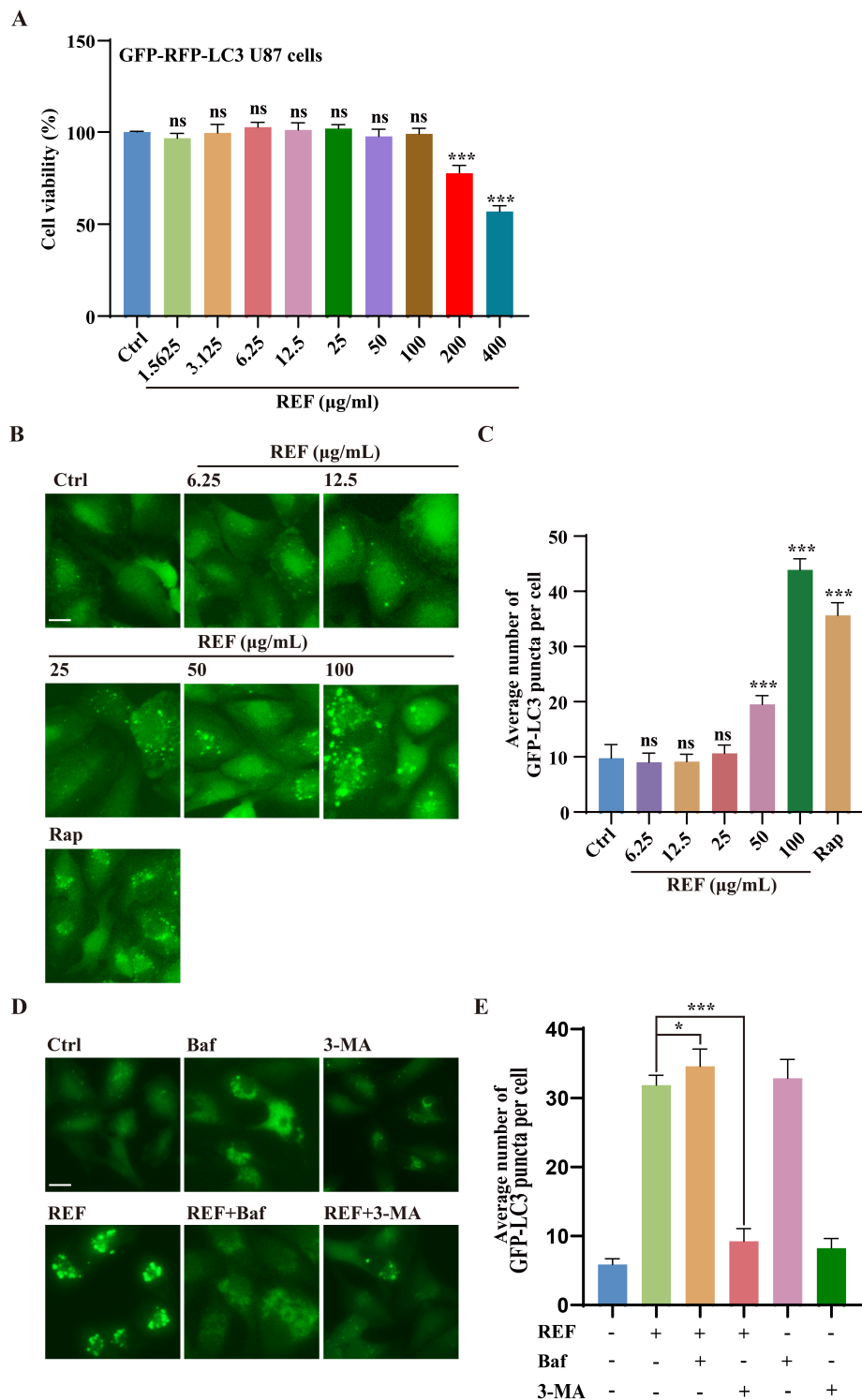


Figure S1. REF induces autophagy in U87 cells. (A) Bar graph indicates the viability of GFP-RFP-LC3 U87 cells treated with different concentrations of REF. Data: mean

\pm SD (n= 3 independent experiments), ns $p > 0.05$, *** $p < 0.001$. **(B-C)** Representative fluorescent images indicate GFP-LC3 puncta in GFP-RFP-LC3 U87 cells treated with different concentrations of REF. Scale bars: 50 μ m. Bar graph indicates the number of GFP-LC3 puncta in GFP-positive cells. Data: mean \pm SD (n= 3 independent experiments), ns $p > 0.05$, *** $p < 0.001$. **(D-E)** Representative fluorescent images indicate GFP-LC3 puncta in GFP-RFP-LC3 U87 cells treated with autophagy inhibitors 3-MA and Baf in the presence or absence of REF. Scale bars: 50 μ m. Bar graph indicates the number of GFP-LC3 puncta in GFP-positive cells. Data: mean \pm SD (n= 3 independent experiments), * $p < 0.05$, *** $p < 0.001$.

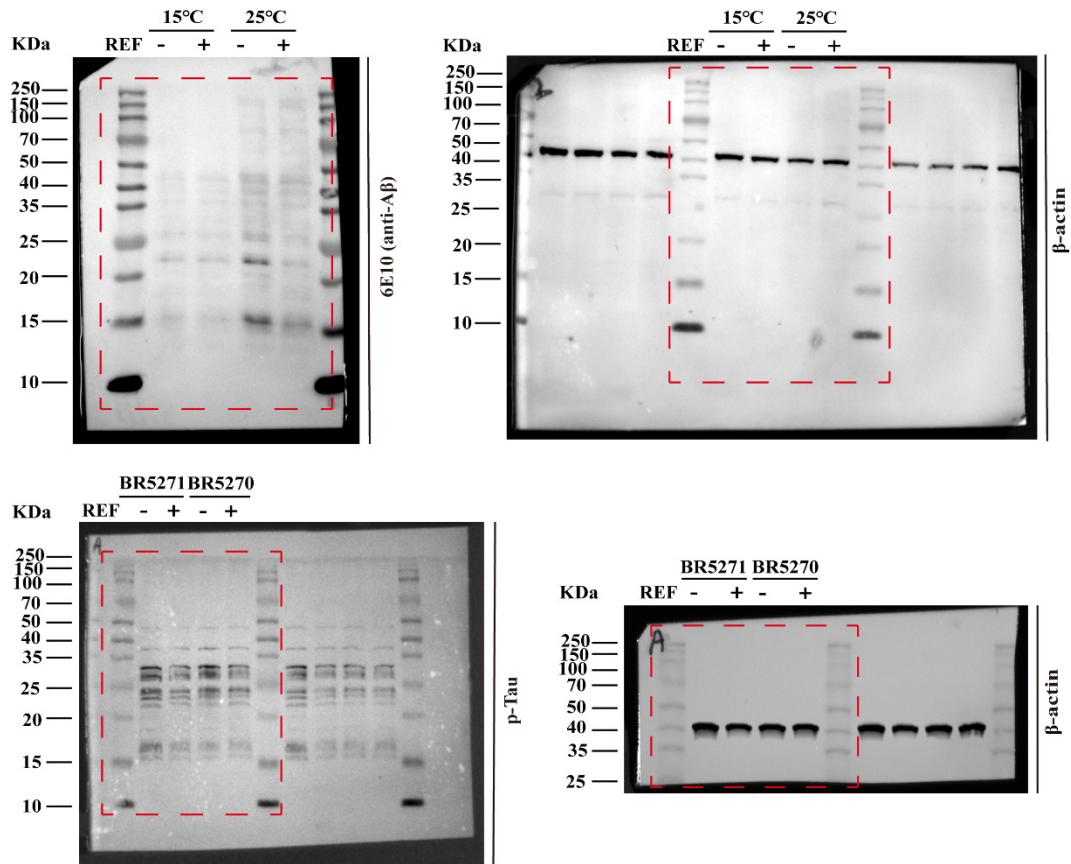


Figure S2. Full-length Western blotting images of Fig. 3.

Supplemental Tables

Table S1. Information on the *C. elegans* strains used in this study.

Strain	Descriptions	Website
N2	Wild-type. <i>C. elegans</i> var Bristol	https://cgc.umn.edu/strain/N2
CL4176	dvIs27 [myo-3p::A-Beta (1-42)::let-851 3'UTR) + rol-6(su1006)] X	https://cgc.umn.edu/strain/CL4176
CL2006	vIs2 [pCL12(unc-54/human Abeta peptide 1-42 minigene) + rol-6(su1006)]	https://cgc.umn.edu/strain/CL2006
CL2331	dvIs37 [myo-3p::GFP::A-Beta (3-42) + rol-6(su1006)]	https://cgc.umn.edu/strain/CL2331
BR5270	byIs161 [rab-3p::F3(delta)K280 + myo-2p::mCherry]	https://cgc.umn.edu/strain/BR5270
BR5271	yIs162 [rab-3p::F3(delta)K280 I277P I380P + myo-2p::mCherry]	https://cgc.umn.edu/strain/BR5271
DA2123	dIs2122 [lgg-1p::GFP::lgg-1 + rol-6(su1006)]	https://cgc.umn.edu/strain/DA2123

BC12921 Is10729 [rCes T12G3.1::GFP + <https://cgc.umn.edu/strain/BC12921>
pCeh361]

Table S2. Primer sequences for qRT-PCR.

Gene name	Primer sequence (5'→3')
<i>lgg-1</i> Forward	ACCCAGACCGTATTCCAGTG
<i>lgg-1</i> Reverse	TCGTGATGGTCCTGGTAGAGT
<i>bec-1</i> Forward	TCAGGACGAGCTTCATTCGC
<i>bec-1</i> Reverse	GCTCCAACAGGATCTCTAATAACA
<i>unc-51</i> Forward	CTATGTTGATCGCACAGACG
<i>unc-51</i> Reverse	CTCCGTGCATTTGAGTAGGC
<i>vps-34</i> Forward	TGTCGATTCTGCCTACCGGA
<i>vps-34</i> Reverse	CGTTGTTCGATCTTGAAAATAGCC
<i>cdc42</i> Forward	CTGCTGGACAGGAAGATTACG
<i>cdc42</i> Reverse	CTCGGACATTCTCGAATGAAG