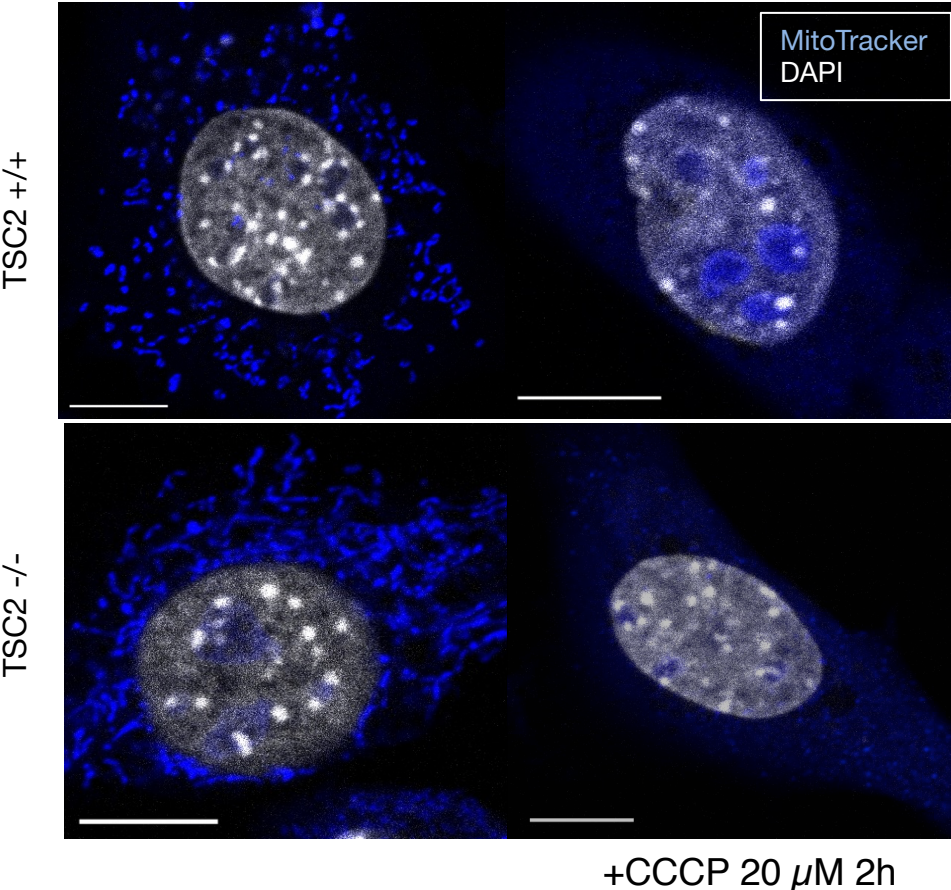
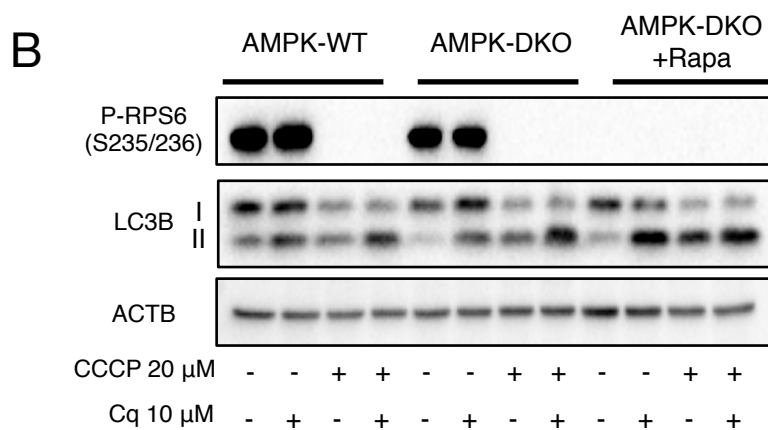
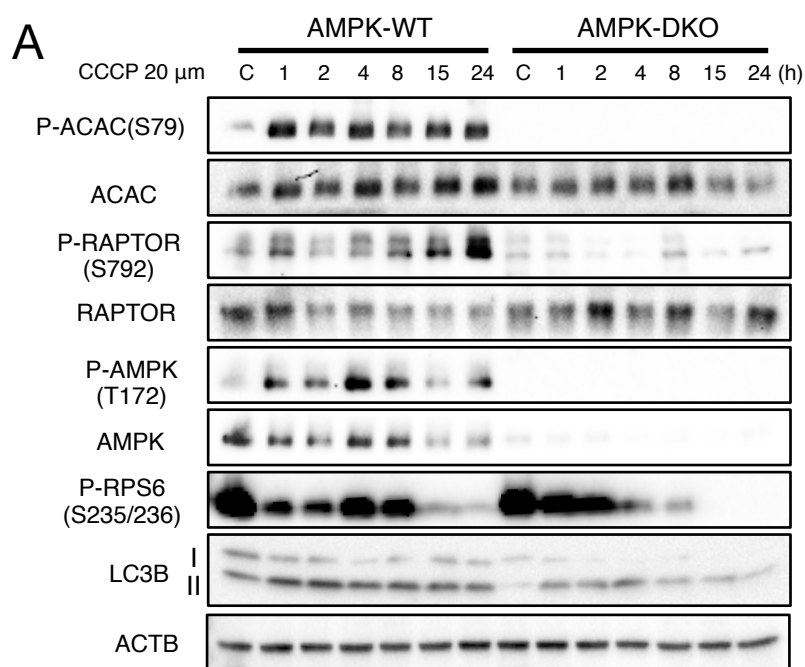


A



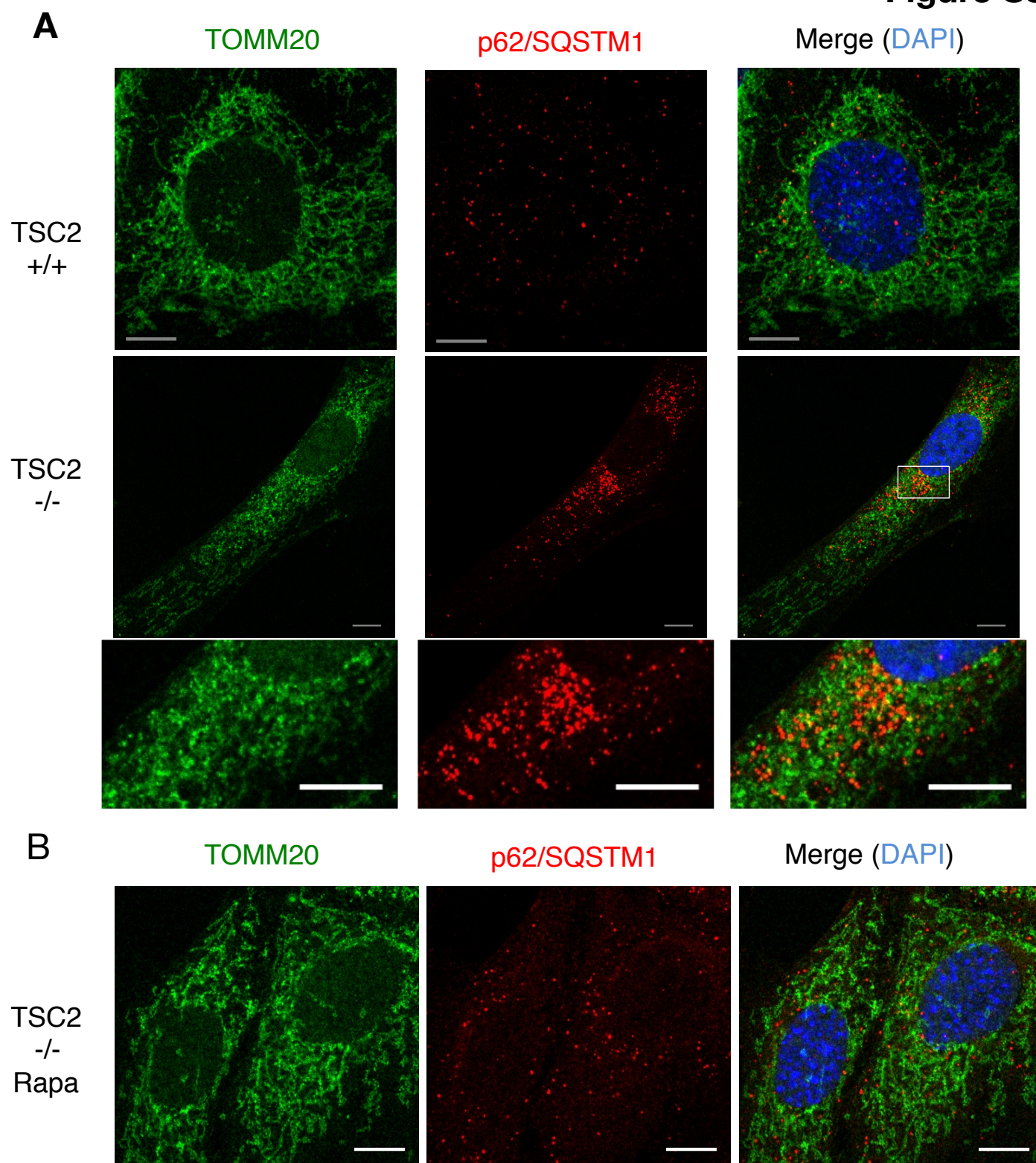
Supplemental Fig1

A) Loss of MitoTracker uptake after CCCP treatment reflects loss of mitochondrial membrane potential in both TSC2 -/- and control cells. Representative confocal microscope images from cells treated for 2h with 20  $\mu$ M CCCP. Other times and doses display showed similar results, not shown. 10  $\mu$ m bar



Supplementary Figure 2. CCCP-mediated mTORC1 downregulation and autophagy stimulation is AMPK independent. (A) AMPK-WT and AMPK-DKO cells were stimulated with CCCP for the indicated times. (B) Cells were stimulated with CCCP for 15h in the presence or absence of chloroquine (CQ) and/or rapamycin 20 nM (Rapa). Representative blots are shown.

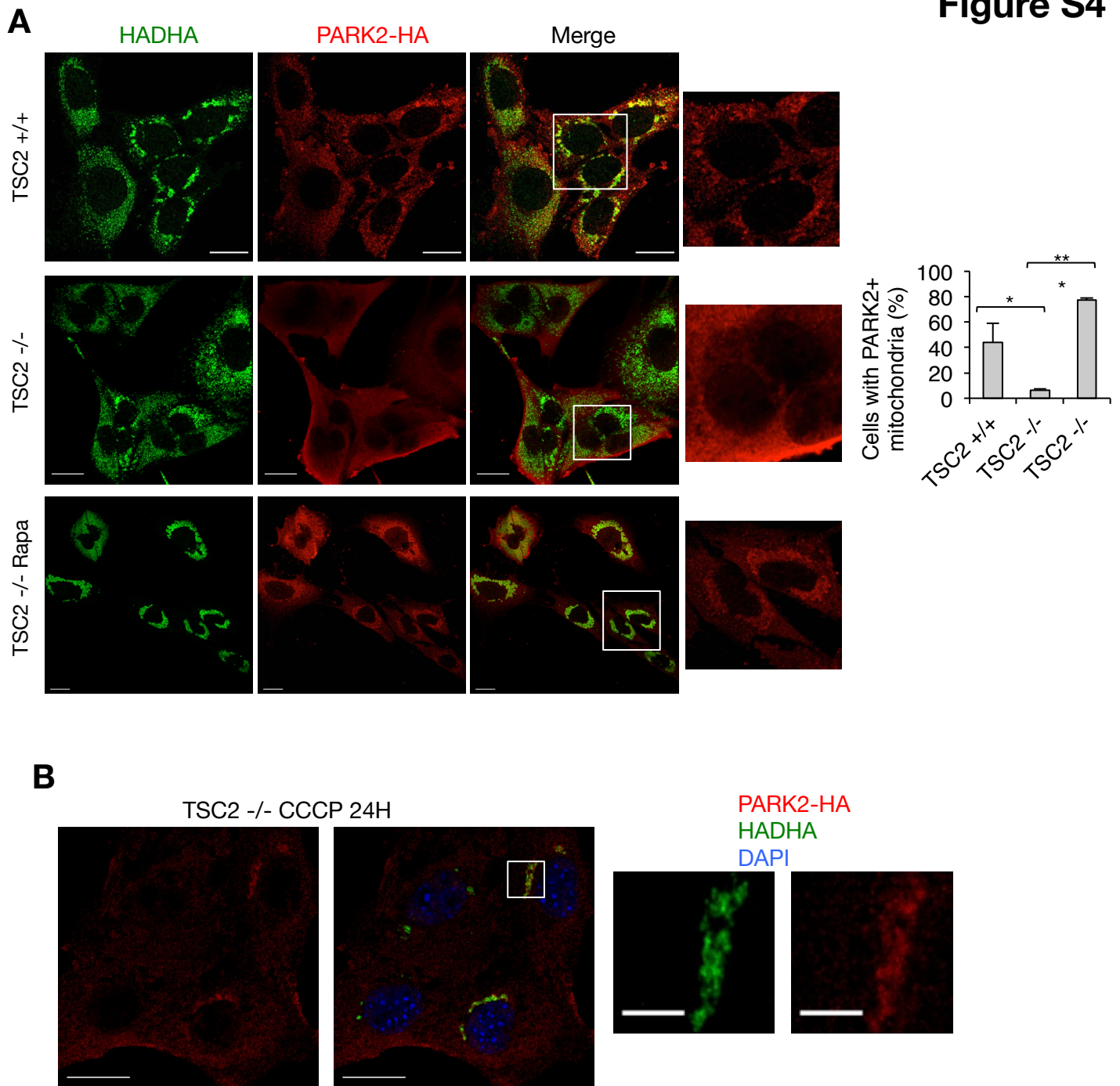
**Figure S3**



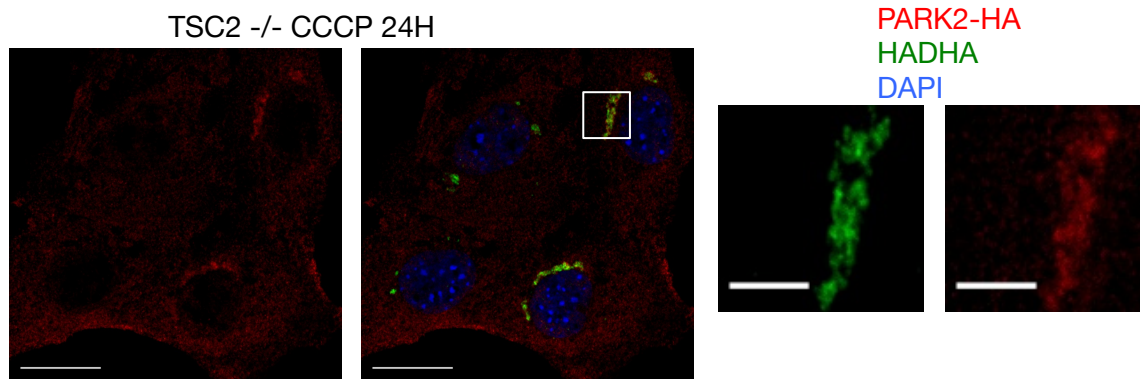
Supplemental Fig3. p62/SQSTM1 positive mitochondria in TSC2 -/- cells. (A) Representative confocal microscopy images of TSC2 +/+ and TSC2 -/- MEFs. (B) TSC2 -/- were treated with 20 nM rapamycin for 15h.



Figure S4



**B**



Supplemental Fig4.

A) Impaired PARK2 translocation to mitochondria in valinomycin-treated TSC -/- cells. Cells were treated with valinomycin 1  $\mu$ M for 3h. Quantification shows percentage of PARK2+ mitochondria, of 3 independent experiments. \*P < 0.05, \*\*\*P < 0.001

B) PARK2 translocation to mitochondria in TSC2 -/- cells after prolonged CCCP treatment (20  $\mu$ M CCCP, 24h). By the time that most mitochondria are cleared in control cells, mitochondrial PARK2 is still observed in TSC2 -/- cells. Bars represent 20  $\mu$ M, or 5  $\mu$ M in enlarged images

**Table S1.** List of antibodies

Antibody	Company	Ref	WB dilution	IF dilution
ACAC	Cell Signaling	#3662	1:1000	
P-ACAC	Cell Signaling	#3661	1:1000	
AMPK	Cell Signaling	#2352	1:1000	
P-AMPK	Cell Signaling	#2531	1:1000	
FOXO1	Cell Signaling	#2880		1:100
LC3B	Cell Signaling	#4108	1:1000	
RAPTOR	Cell Signaling	#4978	1:1000	
P-RAPTOR	Cell Signaling	#2083	1:1000	
RPS6	Cell Signaling	#2217	1:5000	
P-RPS6KB1	Cell Signaling	#9205	1:1000	
RPS6KB1	Cell Signaling	#9202	1:1000	
TSC2	Cell Signaling	#3612	1:1000	
TUBA1A	Cell Signaling	#2144	1:5000	
HADHA	Abcam	#ab54477	1:1000	1:200
TOMM20	Santa Cruz	#sc-11415		1:200
GFP	Santa Cruz	#sc-9996	1:1000	
SQSTM1	Progen	#GP62	1:2500	1:500
PINK1	Novus Biologicals	#BC100-494	1:1000	
P-RPS6	Thermo-Fisher	#MA5-15140	1:2500	
V5	Thermo-Fisher	#R960-25	1:2500	
HA	Roche	#12CA5		1:200
ACTB	Sigma	#A5316	1:5000	

**Table S2.** List of oligonucleotides

<b>Gene</b>	<b>Forward</b>	<b>Reverse</b>
<i>Ppargc1a</i>	AATCAGACCTGACACAACGC	GCATTCCTCAATTCACCAA
<i>Ppargc1b</i>	CGCTCCAGGAGACTGAATCCAG	CTTGACTACTGTCTGTGAGGC
<i>Actb</i>	GACATGGAGAAGATCTGGCA	GGTCTCAAACATGATCTGGGT
<i>Fis1</i>	TGGTGTCTGTGGAGGATCTG	ATTGCGTGCTCTTGGACAC
<i>Mfn1</i>	ATGGCAGAAACGGTATCTCCA	CTCGGATGCTATTCGATCAAGTT
<i>Mfn2</i>	CGAGGCTCTGGATTCACTTC	CAACCAGCCAGCTTTATTCC
<i>Opa1</i>	ACCAGGAGAAGTAGACTGTGTCAA	TCTTCAAATAAACGCAGAGGTG
<i>Drp1</i>	GCTAGTCCACGTTTCACCAGA	TCCATGTGGCAGGGTCAT
<i>Pink1</i>	CTGAGATGCCTGAGTCGGTG	GTGCAGACGGTCTCTTGCT
<i>Mycoplasma sp.</i>	GGCGAATGGGTGAGTAACACG	CGGATAACGCTTGCGACCTATG