

Supplemental Materials

Figure S1. Construction of our AAV1 designed to overexpress Parkin

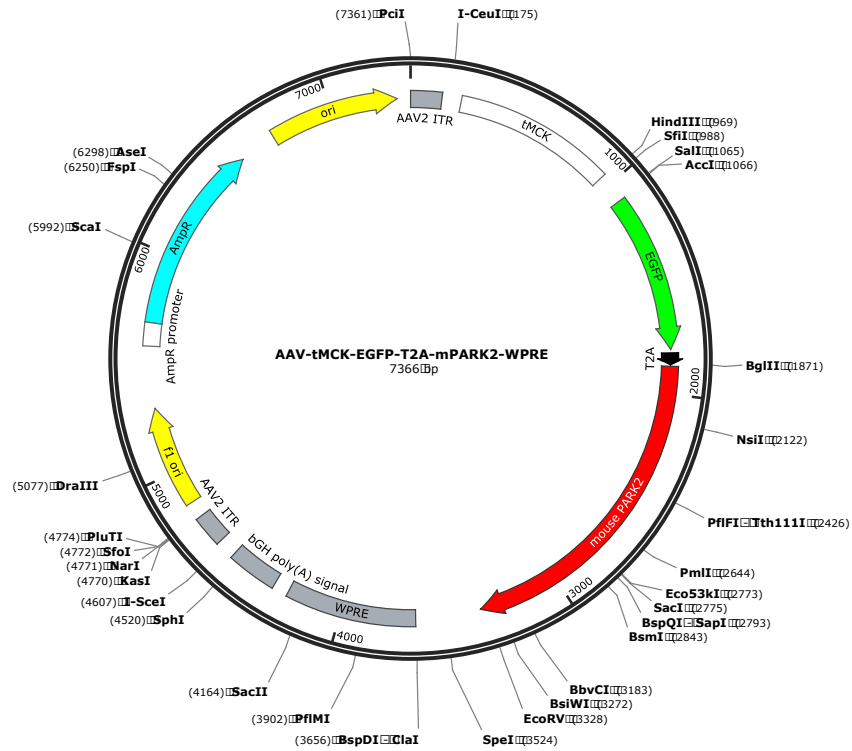


Figure S2. The impact of sepsis and Parkin overexpression on the content and phosphorylation levels of proteins regulating protein synthesis. Immunoblot detection and quantification of p-AKT (Ser473), AKT, p4EBP1(Thr37/46) and 4EBP1. Ponceau stains were used as loading controls. Data are presented as mean \pm SEM. (n= 6-9/group).

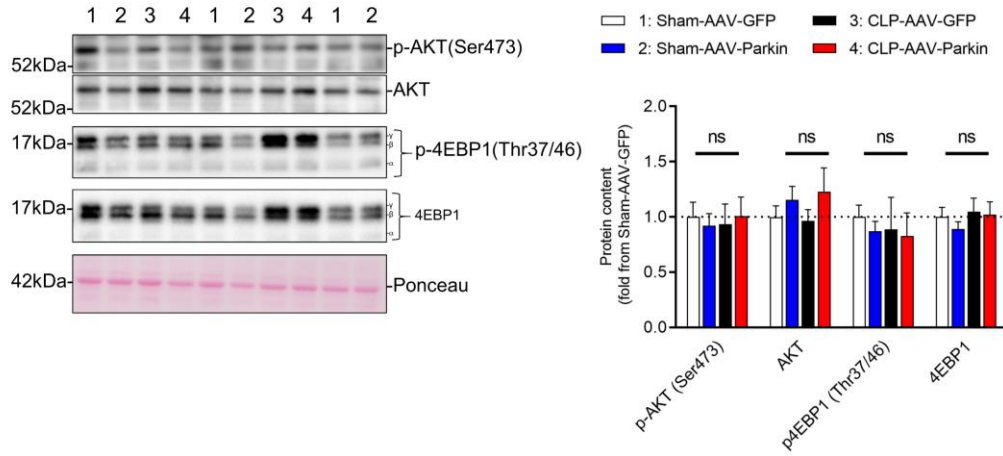
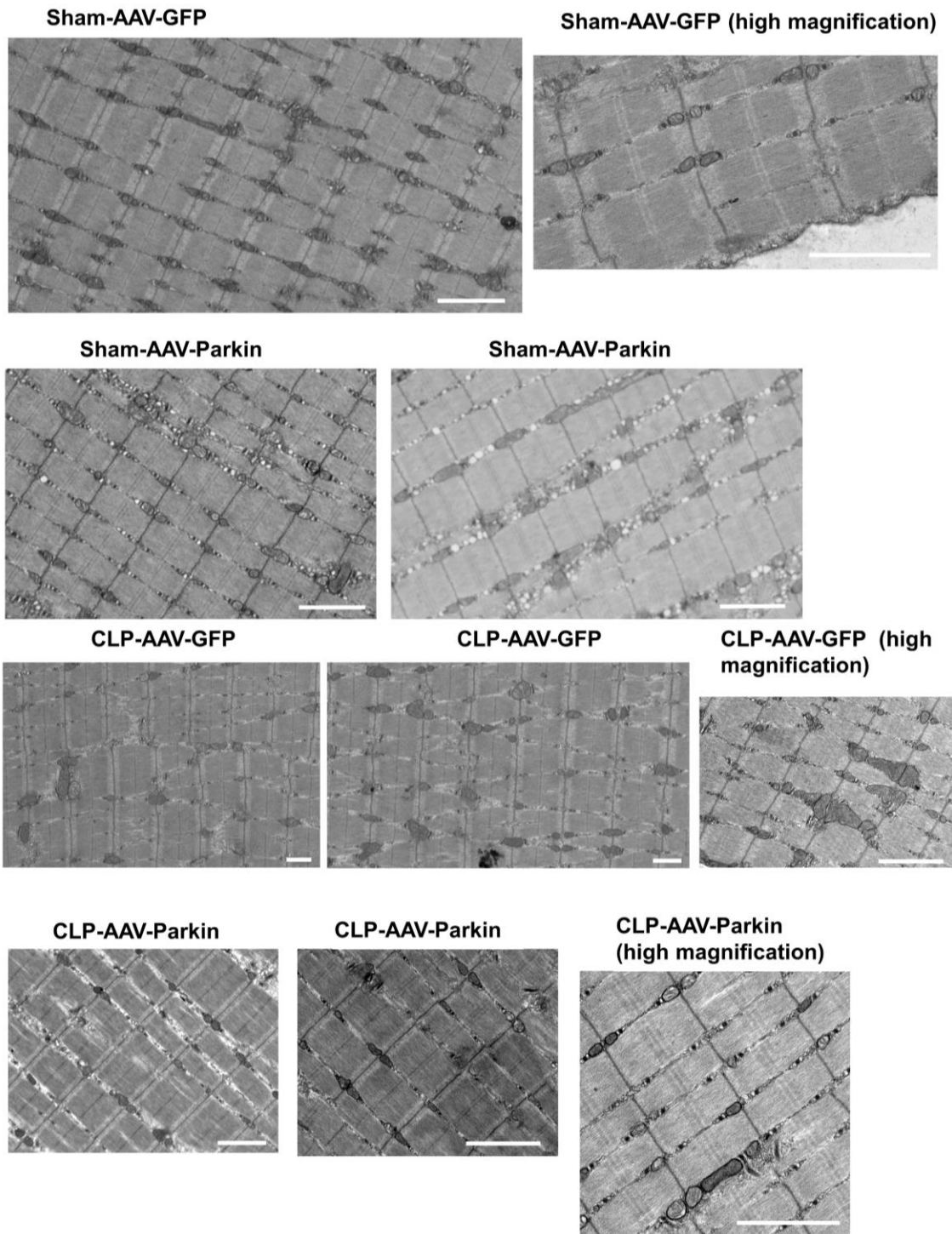


Figure S3. Additional TEM images.



Representative longitudinal TEM images that were used to assess the impact of sepsis and Parkin overexpression on mitochondrial morphology. Scale bar: 2 μ m.

Table S1. List of antibodies

Protein	Dilution	Product no.	Source
BNIP3	1/1000	B7931	Sigma-Aldrich
DRP1	1/1000	# 611113	BD Biosciences
p-DRP1 (Ser616)	1/1000	#3455	Cell Signaling Technology
OPA1	1/1000	#42364	Abcam
MFN2	1/1000	#50843	Abcam
LC3A/B	1/1000	#12741	Cell Signaling Technology
PARKIN	1/1000	sc-32282	Santa Cruz
SQSTM1 (p62)	1/1000	clone 2C11	Novus Biologicals
OXPPOS	1/1000	ab110413	Abcam / MitoSciences
GAPDH (14C10)	1/5000	#2118	Cell Signaling Technology
VADC1/Porin	1/1000	ab14734	Abcam
p-Akt (Ser473)	1/1000	#9271	Cell Signaling Technology
Akt	1/1000	#9272	Cell Signaling Technology
p-4EBP1 (Thr37/46)	1/1000	#9459	Cell Signaling Technology
4EBP1	1/1000	#9644	Cell Signaling Technology

Table S2. List of qPCR primers

	Forward primer (5'-3')	Reverse primer (3'-5')
<i>β-Actin</i>	AACCGTGAAAAGATGACCCAG	CACAGCCTGGATGGCTACGTA
<i>18S</i>	TGCGGTTTAGCGTTCGGTGTC	CCAAGTGGCCAAAGCGTA
<i>Cyclophilin B</i>	GCGTCTCTTCGAGCTGTTT	CTGGCACATGAATCCTGGAA
<i>Bax</i>	GGAGATGAACTGGATAGCAATATGG	GTTTGCTAGCAAAGTAGAAGAGGGC
<i>Bid</i>	CACAACATCCAGCCCACT	CTCCATGTCTCTGGGGAAGG
<i>Bim</i>	GCAATGGCTTCCATACGACA	TTGCAAACACCCTCCTTGTTG
<i>Bcl2</i>	CATGTGTGTGGAGAGCGTCA	ATCCCAGCCTCCGTTATCCT
<i>BclXL</i>	TGGGGAGCAACATTCATCAG	AGTCCTCCTCCATCCCTTC
<i>Mfn1</i>	ATGGCAGAAACGGTATCTCCA	CTCGGATGCTATTCGATCAAGTT
<i>Mfn2</i>	GCTCAGGAGCAGCGGGTTTA	TGTGGACACCTGCCTTTCCA
<i>Opal</i>	CAGAGGATGGTGTCTCGTGGA	TCCGTCTTGGATGCACAGGA
<i>Fis1</i>	TGTCCAAGAGCACGCAATTTG	CCTCGCACATACTTTAGAGCCTT
<i>Drp1</i>	CCTCAGATCGTCGTAGTGGGA	GTTCCCTCTGGGAAGAAGGTCC
<i>Lc3b</i>	CGATACAAGGGGGAGAAGCA	ACTTCGGAGATGGGAGTGGA
<i>Bnip3</i>	TTCCACTAGCACCTTCTGATGA	GAACACCGCATTACAGAACAA
<i>p62/SQSTM1</i>	GCACCTGTCTGAGGGCTTCT	GCTCCAGTTTCTGGTGGAC
<i>Park2</i>	TCTTCCAGTGTAACCACCCTGTC	GGCAGGGAGTAGCCAAGTT
<i>Gabarapl1</i>	GAGGACCACCCCTTCG	CGGAGGGCACAAGGTACTTC
<i>Fbxo32</i>	TGGGTGTATCGGATGGAGAC	TCAGCCTCTGCATGATGTTT
<i>Trim63</i>	TGCTTGGCACTTGAGAGGAA	AGAAGCTGGGCTTCATCGAG
<i>Tfam</i>	GCACCCTGCAGAGTGTTCAA	CGCCCAGGCCTCTACCTT
<i>Nrf1</i>	CGCTCATCCAGGTGGTACA	TCCATCAGCCACAGCAGAGT
<i>Nrf2</i>	CTCCCAGGTTGCCACATTC	TCAGTCATGGCTGCCTCCAG
<i>Sirt1</i>	GGATGATATGACAAACCCAG	ACAGGAGACAGAAACCCAG
<i>Sirt3</i>	CCCCGCTGCCCTGTCTGATC	TGATGAGCAGTCGGGGCACTG
<i>Pgc1-α</i>	TTGCTAGCGGTCCTCACAGA	GTCAGGCATGGAGGAAGGAC
<i>Pgc1-β</i>	GACCCCTTCAAGCCAGACAC	TGAGACTGGTTGGGTTGTGG