Supplementary Material

Crosstalk between mitochondrial Ca²⁺ uptake and autophagy in skeletal muscle

Gaia Gherardi, Giulia Di Marco, Rosario Rizzuto and Cristina Mammucari

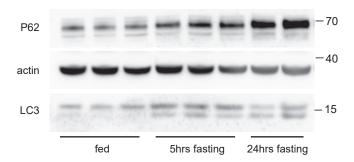


Fig S1. LC3 and P62 protein levels increase during starvation in wild type muscles, related to Figure 1. Immunoblotting analysis of wild type EDL muscles subjected to 5 hours or 24 hours of starvation. Increases in LC3-II and p62 protein levels were detected. Actin protein levels were used as loading control.

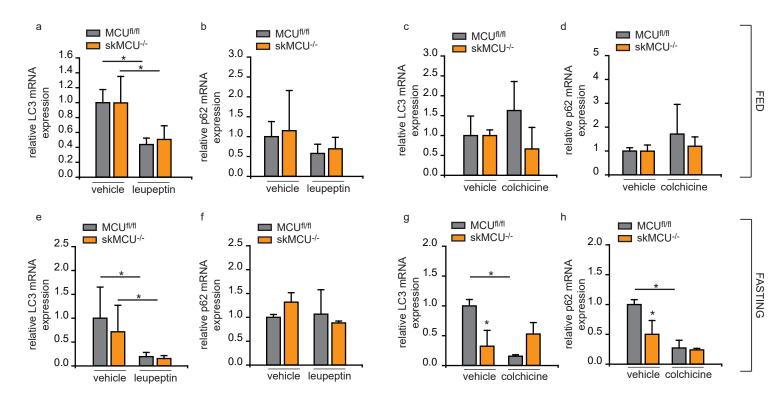


Fig S2. LC3 and p62 relative mRNA levels are modulated by leupeptin or colchicine treatment both in MCU^{fl/fl} and skMCU^{-/-} mice, related to Figure 2.

(a-d) Relative mRNA levels of LC3 and p62 in EDL muscles of skMCU^{-/-} or MCU^{n/n} mice treated or not with leupeptin (a-b) or colchicine (c-d) in fed conditions. *p <0.05, t- test (two-tailed, unpaired) of 3 animals per condition. Data are presented as mean \pm SE.

(e-h) Relative mRNA levels of LC3 and p62 in EDL muscles of skMCU^{-/-} or MCU^{n/n} mice treated or not with leupeptin (e-f) or colchicine (g-h) in starving conditions. *p <0.05, t- test (two-tailed, unpaired) of 3 animals per condition. Data are presented as mean \pm SE.