## **Supplemental Figures and Legends**

FIGURE S1. Levels of mitochondrial genes in skeletal muscle of TWEAK-Tg and TWEAK-KO mice 10d post-denervation. 3 months old wild-type, TWEAK-Tg, and TWEAK-KO mice were denervated for 10d and mRNA levels of mitochondria-related genes were measured by performing QRT-PCR. (A) Relative mRNA levels Cyt c, CoxI, and Tfam in undenervated and 10d denervated TA muscle of wild-type and TWEAK-KO mice. (B) Relative mRNA levels Cyt c in undenervated and 10d denervated TA muscle of wild-type and TWEAK-KO mide-type and TWEAK Tg mice. Error bars represent SD. N=3 in each group. \*p<0.01, values significantly different from contralateral undenervated muscle.  $^{\#}p < 0.05$ , values significantly different from denervated muscle of wild type mice. WT, wild type.

FIGURE S2. PGC-1 $\alpha$  protein levels in skeletal muscle of wild-type and PGC-1 $\alpha$  Tg mice. Western blot analysis of PGC-1 $\alpha$  and an unrelated protein tubulin in soleus (Sol) and extensor digitorum longus (EDL) muscle of wild-type and PGC-1 $\alpha$  Tg mice.

## FIGURE S1



## FIGURE S2

