

## **APPENDIX I. SUPPLEMENTAL MATERIAL**

### **Mitochondrial therapy improves limb perfusion and myopathy following hindlimb ischemia**

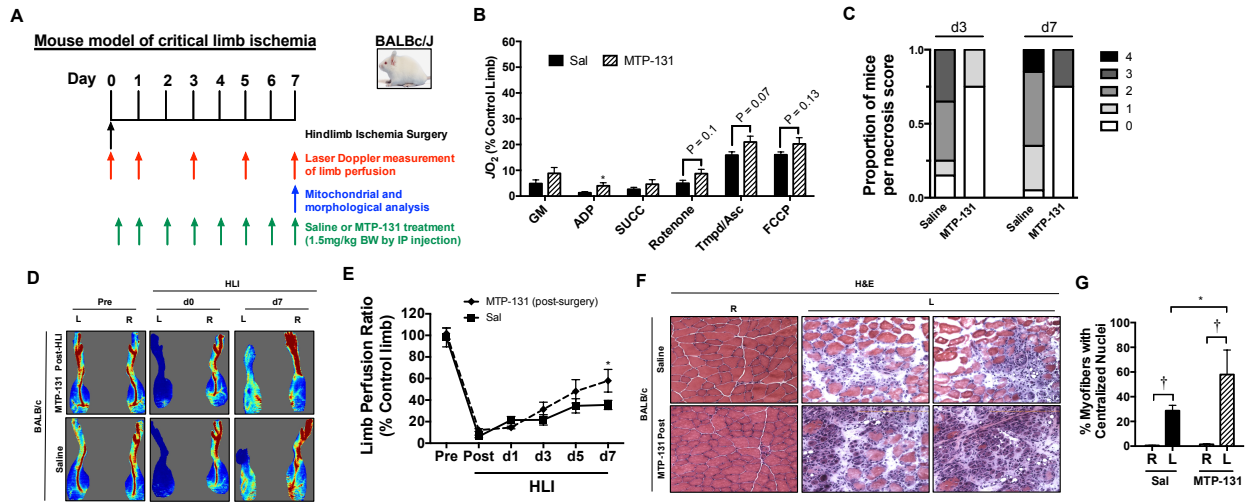
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**Running Title:** Mitochondrial therapy rescues ischemic pathology

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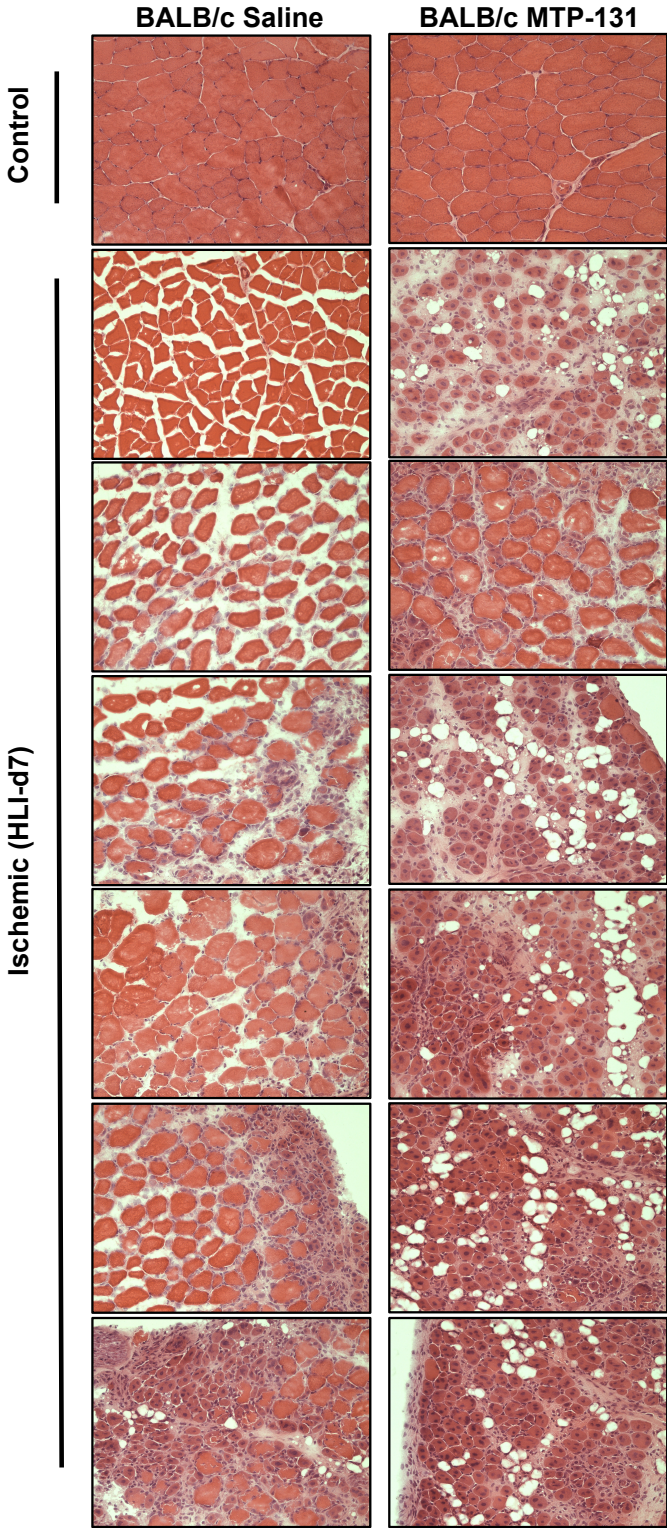
## Supplemental Figure 1



**Supplemental Figure 1: Effects of post-surgery MTP-131 therapy on limb necrosis and perfusion, muscle regeneration, and skeletal muscle mitochondrial function.** MTP-131 or Saline was administered by IP-injection 6-hours post hindlimb ischemia (HLI), and once daily until sacrifice. **A.** Graphical display of experimental time course. **B.** Skeletal muscle mitochondrial respiratory function (expressed as a percentage of the non-ischemic limb [L/R]) HLI d7 (n=10 for saline group; n=4 for MTP-131 group). **C.** Distribution of limb necrosis score after 3- and 7-day HLI (n=16 for saline group; n=4 for MTP-131 group). **D.** Representative images from laser Doppler perfusion imaging in mice before (Pre), immediately post-op (d0), and HLI d7. **E.** Quantitation of whole limb perfusion, presented as a ratio of ischemic (L) to non-ischemic (R) limb perfusion (n=16 for saline group; n=4 for MTP-131 group). \* P<0.05 vs. Saline. **F.** Representative H&E images (20x magnification) demonstrating TA morphology after HLI d7. R, right (non-surgical limb); L, left (surgical limb). **G.** Quantitation of regenerating TA myofibers (centralized nuclei) at HLI d7 (n=10 for saline group; n=4 for MTP-131 group). † P<0.05 vs. contralateral control (R). \* P<0.05 vs. Saline Ischemia (L).

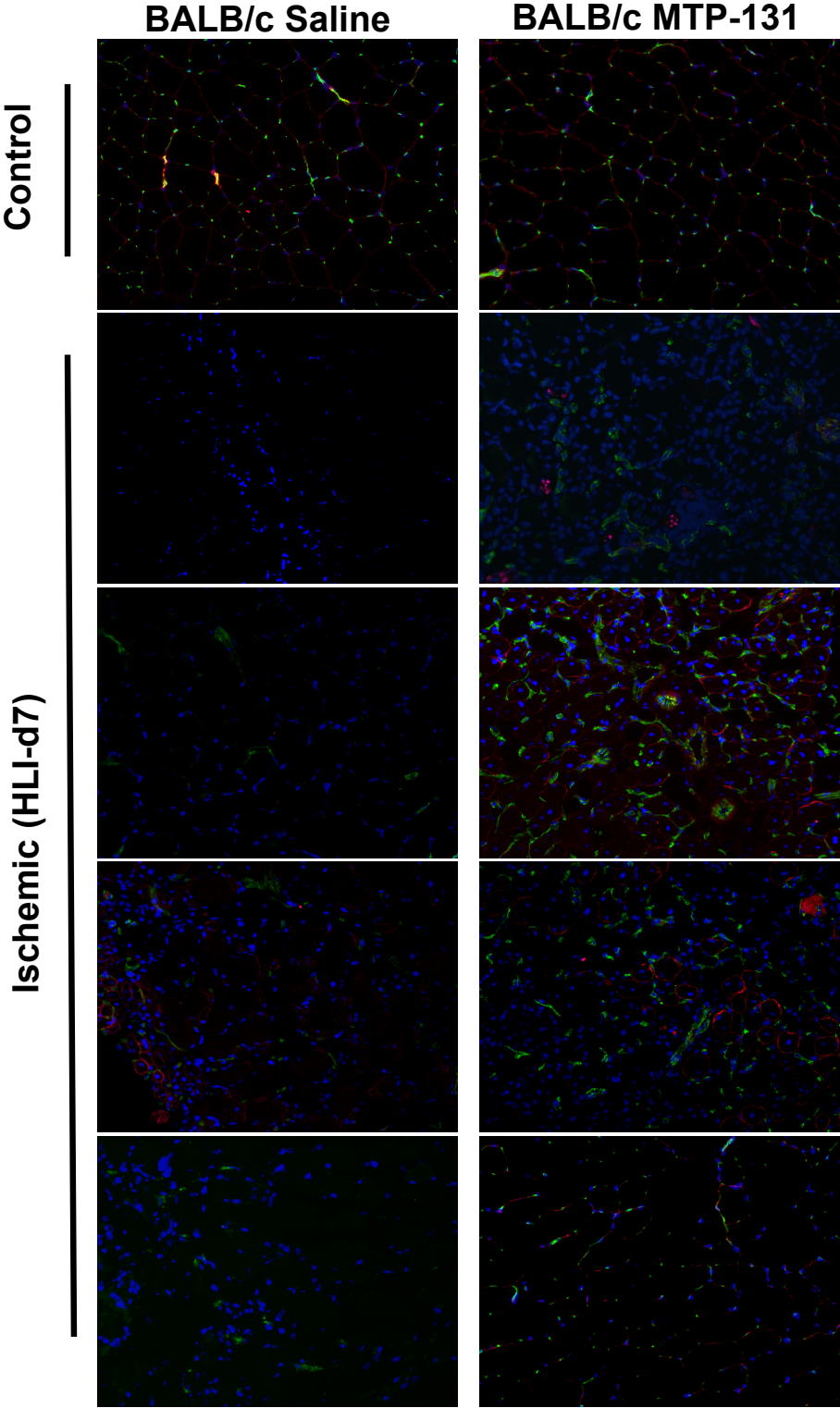


**Supplemental Figure 2**



**Supplemental Figure 2. Representative H&E images from control and ischemic TA muscle (day 7 post-HLI) of saline- and pre-surgery MTP-131-treated mice.**

Supplemental Figure 3



Supplemental Figure 3. Representative IF images from control and ischemic TA muscle (day 7 post-HLI) of saline- and pre-surgery MTP-131-treated mice (Blue=DAPI; Green=CD31<sup>+</sup>; Red=Dytrophin).