

Supplementary Figure S1. Ang-(1-7) improves the muscle function in mice fed with a DDC diet. Male mice C57BL/6J (16 weeks old) were randomly separated into four groups: Control, Ang-(1-7), DDC, and DDC + Ang-(1-7). DDC was administrated by diet for six weeks, whereas Ang-(1-7) was administered through osmotic minipumps for six weeks. A rotarod test evaluated muscle function. Time (in s) that the animal is on the cylinder was registered. The values correspond to the mean \pm SEM (five or six animals per group, three independent experiments; (* *p* < 0.05 vs. Control, # *p* < vs. DDC. One-way ANOVA, Tukey's multiple comparisons test).



Supplementary Figure S2. Ang- (1-7) alone does not produce alterations in myofibrillar proteins or autophagy markers. C57BL/6J male mice were fed for six weeks with a standard diet and separated into two groups: without (Control) or with Ang-(1-7) (administered through osmotic pumps). At the end of 6 weeks, the mice were sacrificed, the gastrocnemius muscle was removed, and protein extraction was performed. (A) MHC and (C) LC3 protein levels were evaluated by western-blot, using β -actin as the loading control, and the molecular weight is depicted in kilodaltons. Densitometric analysis of the bands was performed and shown as fold of induction in MHC (**B**) and the ratio of LC3II/LC3I (**D**). Values represent the mean ± SEM of three independent experiments. In each experiment, five mice were used for each experiment.