

SUPPLEMENTARY INFORMATION

Additional file 1: Figure S1

Fig.S1.

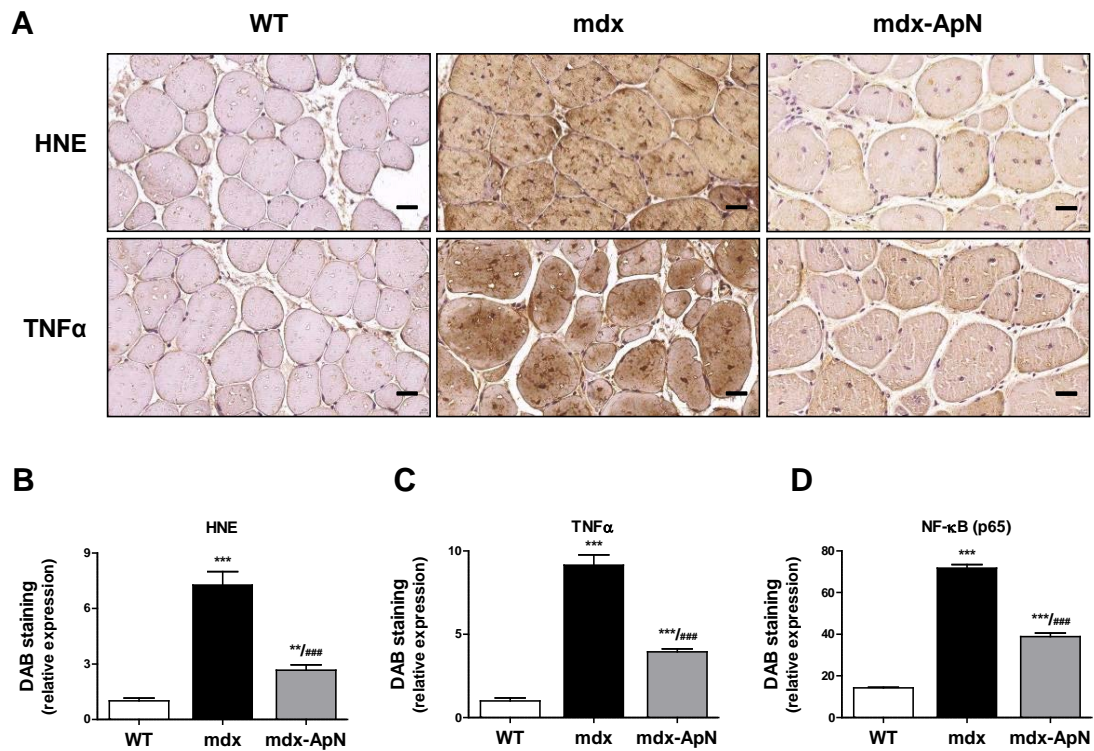


Fig. S1. Effects of adiponectin on markers of oxidative stress and inflammation in muscles of 1 yr-old mdx mice. (A) *Tibialis anterior* muscles were sampled from 1 yr-old WT mice, mdx mice or mdx mice overexpressing adiponectin (mdx-ApN). Immunodetection was performed with specific antibodies directed against one pro-inflammatory cytokine (TNF α), and one oxidative stress marker (HNE). Scale bar = 25 μ m. (B) HNE and (C) TNF α immunolabeling, the percentage of DAB deposit areas was calculated within the muscle fibers. (D) Quantification of p65 immunolabeling in myofiber nuclei (expressed as percent of total nuclei). Data are means \pm SD for 4 mice and are presented relative to DAB ratio in WT mice.

** $p < 0.01$, *** $p < 0.001$ vs. WT. ### $p < 0.001$ vs. mdx.

Additional file 2: Movie S2

Movie S2. Effects of adiponectin on mdx mice subjected to downhill treadmill running.

Mice ($n=6$ /group) were subjected to an eccentric exercise consisting of a 10 min downhill running on a treadmill with an inclination of 15° , at a speed of 10 m/min, and then repeated daily for 3 days. When mice stopped exercising, a mild electrical current was discharged by an electric grid (indicated by a star) to keep them running on the treadmill. A representative video shows the difference of global muscular force between a regular mdx mouse (on the right) and a mdx-ApN mouse (on left) on the 3rd day. Mdx mice struggled during the last session of the exercise and remained most of the time on -or nearby- the electric grid, while most mdx-ApN mice completed the exercise.