

Supplementary Material

Nox4 Knockout Does Not Prevent Diaphragm Atrophy, Contractile Dysfunction, or Mitochondrial Maladaptation in the Early Phase Post-Myocardial Infarction in Mice

Dongwoo Hahn^a Ravi A. Kumar^a Derek R. Muscato^a Terence E. Ryan^a
Katrin Schröder^b Leonardo F. Ferreira^a

^aDepartment of Applied Physiology and Kinesiology, College of Health and Human Performance, University of Florida, Gainesville, FL, USA, ^bInstitute for Cardiovascular Physiology, Goethe University, Frankfurt, Germany

Supplemental Results

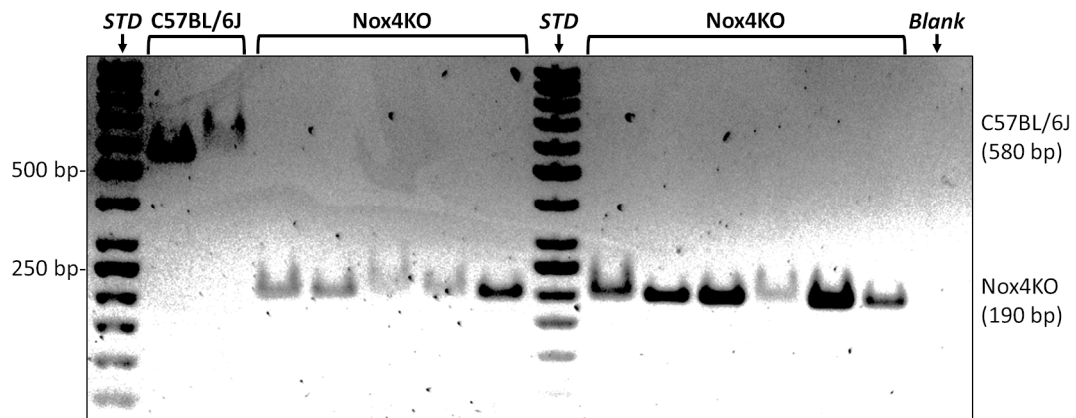


Figure S1. Genotyping results from gastrocnemius showing bands consistent with WT (C57BL/6J; 580 bp) and Nox4 knockout (190 bp). STD lanes show the location of standard base pair (bp), and blank lane shows empty template. 1 sample/each mouse.

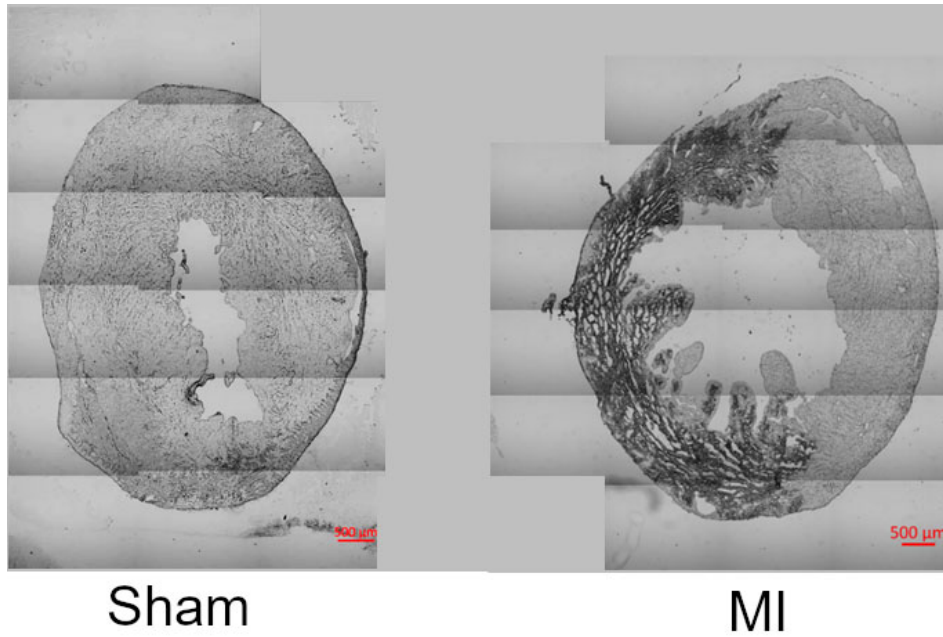


Figure S2. Representative image of Wheat Germ Agglutinin (WGA) staining in transverse sections of the hearts from Sham and post-MI. Images were obtained with an inverted microscope (Axio Observer; Zeiss, Thornwood, NY) connected to a camera (AxioCam ERc5s) using Zen Pro software (Zeiss).

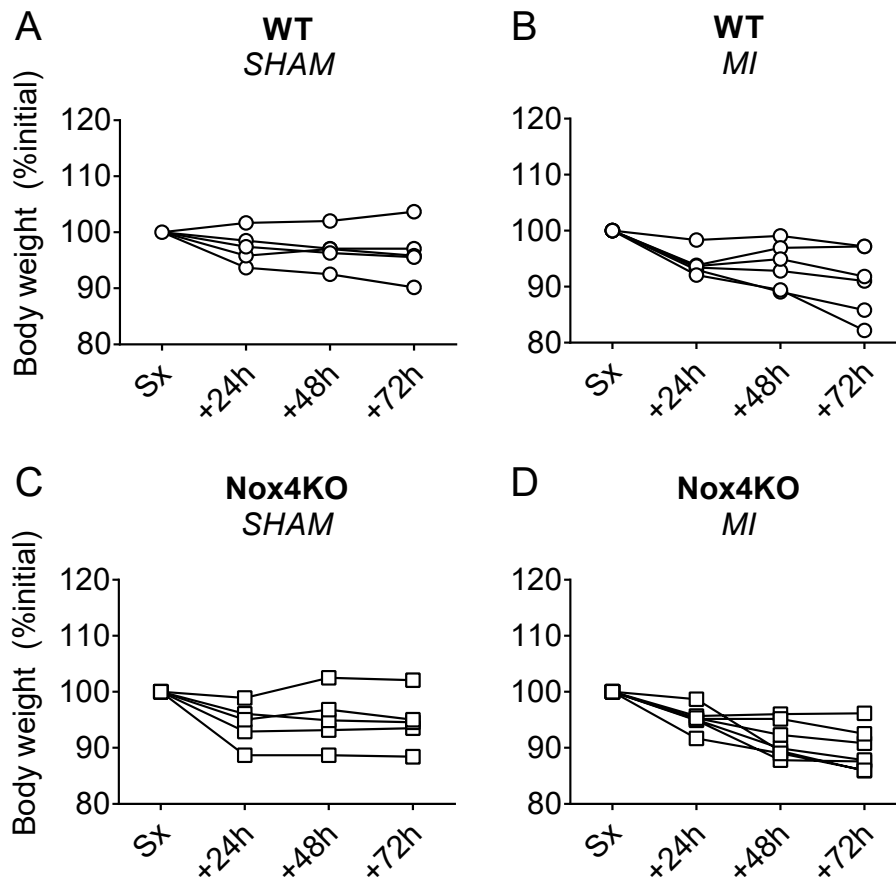


Figure S3. Bodyweight after Sham and myocardial infarction surgery. Symbols show data from individual mice as percentage of bodyweight immediately before surgery. N = 5-7 mice/group.

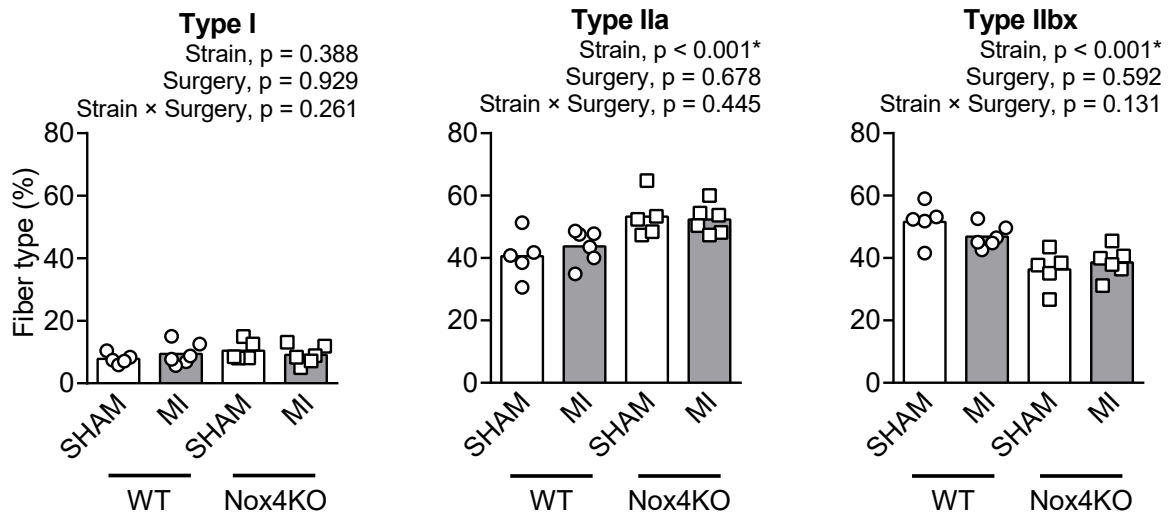


Figure S4. Diaphragm percentage fiber type distribution determined from immunofluorescence (e.g., Figure 1). Bars show mean values. $N = 5-6$ mice/group. Statistics by two-way ANOVA. $*p < 0.05$.

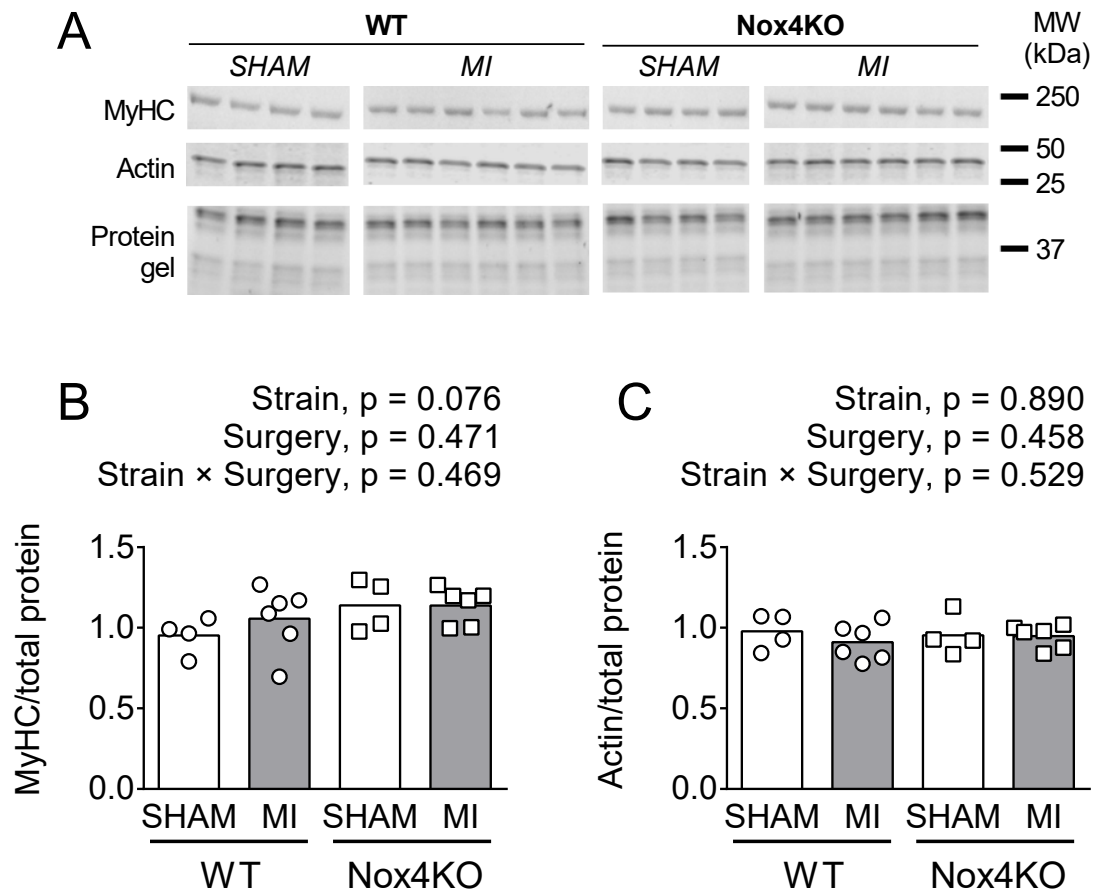


Figure S5. Diaphragm myosin heavy chain (MyHC) and actin protein abundance. (A) Band corresponding to MyHC on Stain-Free gel (top), actin immunoblots (middle), and representative region of total protein in a gel (bottom). Approximate molecular weight (MW) shown by horizontal solid line. (B) Optical density of MyHC signal normalized to the total protein signal from each lane. (C) Optical density of actin immunoblots normalized to total protein signal from each lane. Data are means from measurements in triplicate. Bars are mean values per group. $N = 4-6$ mice/group. Statistical analysis by two-way ANOVA.