

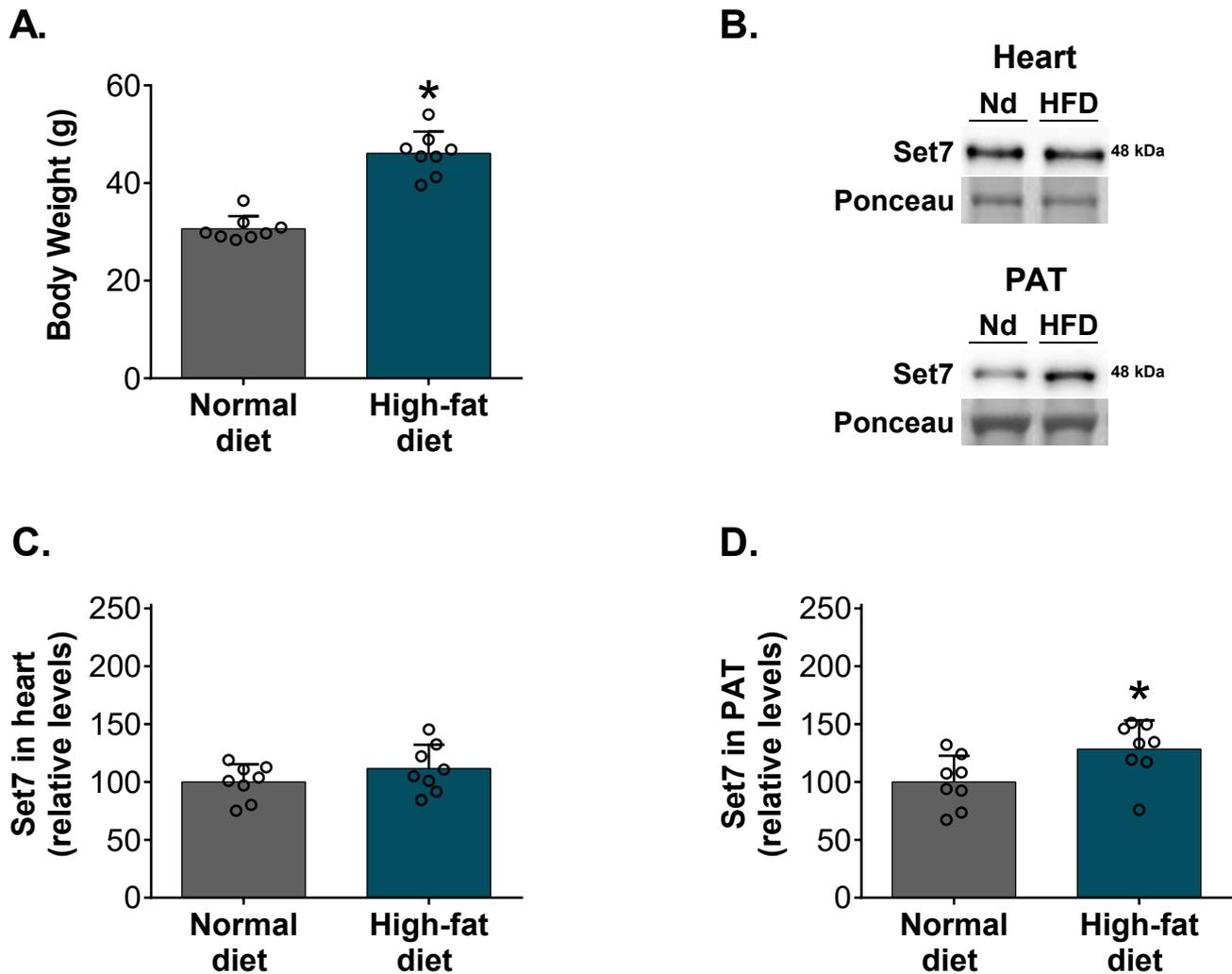
## Supplementary Material

# Set7 Deletion Prevents Glucose Intolerance and Improves the Recovery of Cardiac Function After Ischemia and Reperfusion in Obese Female Mice

Juliane B. Miranda<sup>a</sup> Guilherme Lunardon<sup>a</sup> Vanessa M. Lima<sup>a</sup>  
Tábatha de Oliveira Silva<sup>a</sup> Caroline A. Lino<sup>a</sup> Leonardo Jensen<sup>b</sup>  
Maria Cláudia Irigoyen<sup>b</sup> Ivson Bezerra da Silva<sup>c</sup> Yao Wei Lu<sup>d</sup>  
Jianming Liu<sup>d</sup> Jose Donato Júnior<sup>e</sup> Maria Luiza M. Barreto-Chaves<sup>a</sup>  
Da-Zhi Wang<sup>d,f</sup> Gabriela P. Diniz<sup>a</sup>

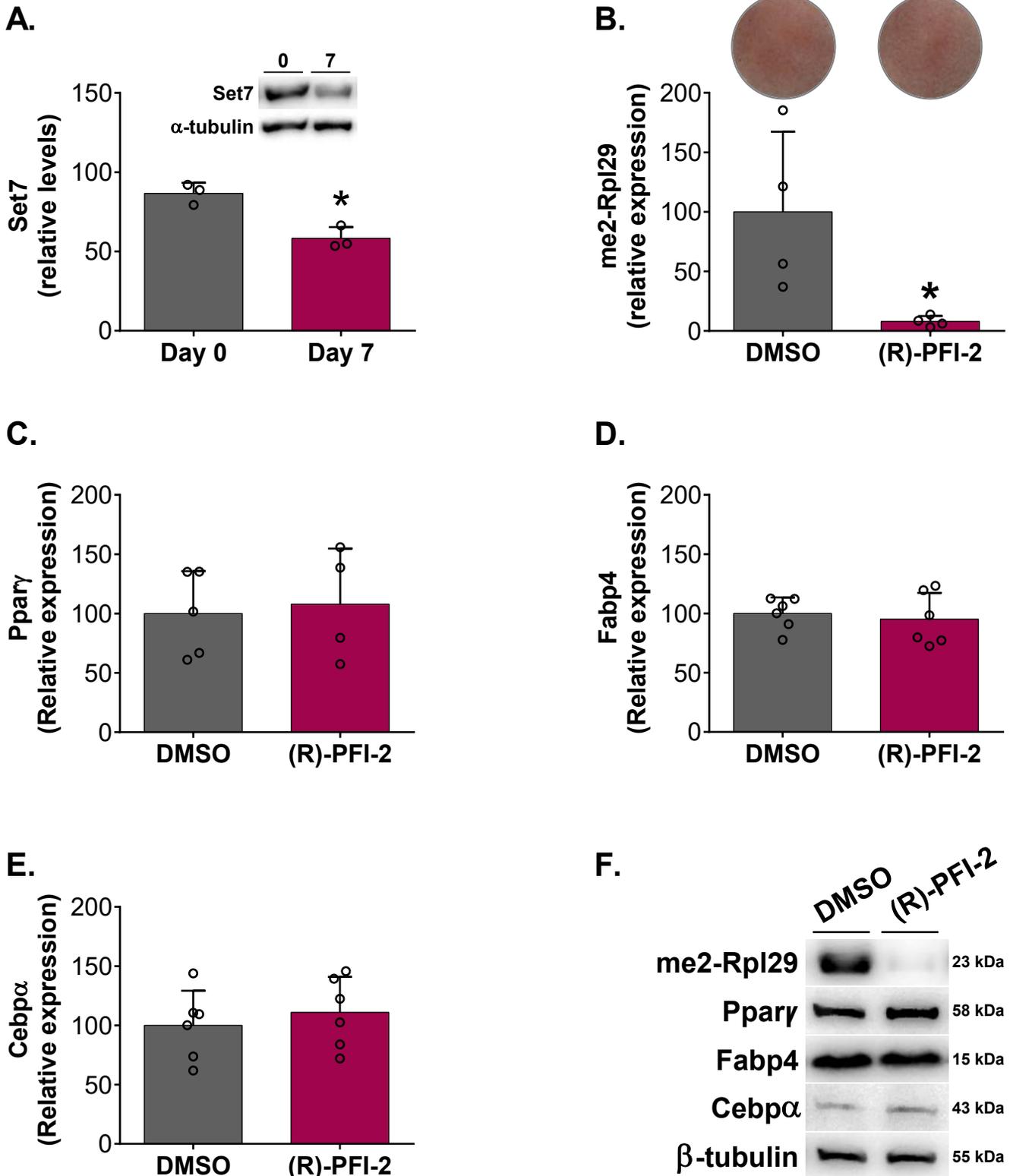
<sup>a</sup>Department of Anatomy, Institute of Biomedical Sciences, University of Sao Paulo, Sao Paulo, Brazil, <sup>b</sup>Hypertension Unit, Heart Institute, University of Sao Paulo, Sao Paulo, Brazil, <sup>c</sup>Department of Morphology, Federal University of Paraiba, Paraiba, Brazil, <sup>d</sup>Department of Cardiology, Boston Children's Hospital, Harvard Medical School, Boston, MA, USA, <sup>e</sup>Department of Physiology and Biophysics, Institute of Biomedical Sciences, University of Sao Paulo, Sao Paulo, Brazil, <sup>f</sup>Center for Regenerative Medicine, USF Health Heart Institute, University of South Florida, Tampa, FL, USA

## Supplementary Figure 1



**Supplementary Figure 1. Set7 protein levels are increased in the perigonadal adipose tissue of obese male mice.** (A) Body weight of WT male mice fed a normal diet (Nd) and high-fat diet (HFD) for 12 weeks (n=8). (B) Representative images of western blotting for Set7 and ponceau staining. Set7 protein levels in the heart (C) and PAT (D) of WT male mice fed a normal diet (Nd) and high-fat diet (HFD) evaluated by western blot (n=8). \*vs Nd (p<0,05).

## Supplementary Figure 2



**Supplementary Figure 2. Inhibition of Set7 does not affect white adipocyte differentiation in vitro.** (A) Set7 protein levels in 3T3-L1 cells (0 day) and at day 7 after induction of white adipocyte differentiation (day 7) evaluated by western blotting (n=3). Protein levels of me2-Rpl29 (B) (n=4), Ppar $\gamma$  (C) (n=5-4), Fabp4 (D) (n=6), and Cebp $\alpha$  (E) (n=6) in white adipocytes treated with DMSO or (R)-PFI-2 evaluated by western blotting. (B) Representative images of white adipocytes stained with Oil Red O. (F) Representative images of western blotting for me2-Rpl29, Ppar $\gamma$ , Fabp4, and Cebp $\alpha$ . The protein levels were normalized by  $\alpha$ -tubulin (A) and  $\beta$ -tubulin (B, C, D, E, F). \* vs DMSO (p<0,05).