

Supplemental Figure Legends:

Figure S1. Basic characteristic of mice. (A) weight of mice. **(B)** systolic blood pressure. Data are mean \pm SD; n=10 per group. *p<0.05 vs Control.

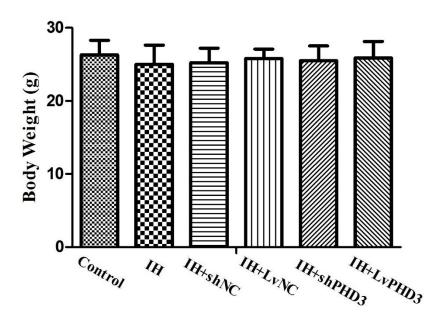
Figure S2. Change of PHD3 expression in vivo and vitro by lentivirus transfection (A)Western blot analysis of PHD3 protein level relative to that of β-actin (a1) and quantitative analysis(a2) in vivo. (B) Representative photograph of GFP-labeled scramble transfection efficiency in HUVECs by fluorescence microscopy; the transfection efficiency was evaluated at more than 90% (original magnification ×100 bar=50μm). (C) Western blot analysis of PHD3 protein level relative to that of β-actin (c1) and quantitative analysis(c2) in vitro. Data are mean±SD; n=10 per group. *p<0.05 vs shNC or #p<0.05 vs LvNC.

Figure S3. Masson and collagen I III staining in myocardium region Representative images of the heart section with Masson's trichrome (blue staining), and immunohistochemical staining of collagen I collagen III (yellow staining) for each group. (original magnification ×400 bars=20μm).

Figure S4. PHD3 overexpression improve IH-induced EndMT. Representative images of immunohistochemical staining of α-SMA (yellow staining) in the perivascular and vascular region. The presence of α-SMA is detected in endothelial cells (red arrows)(original magnification $\times 400$ bars= $20 \mu m$).

Figure S1.





B

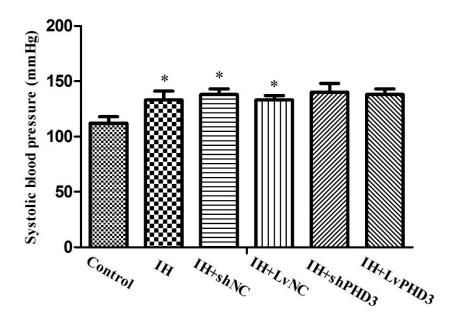


Figure S2.

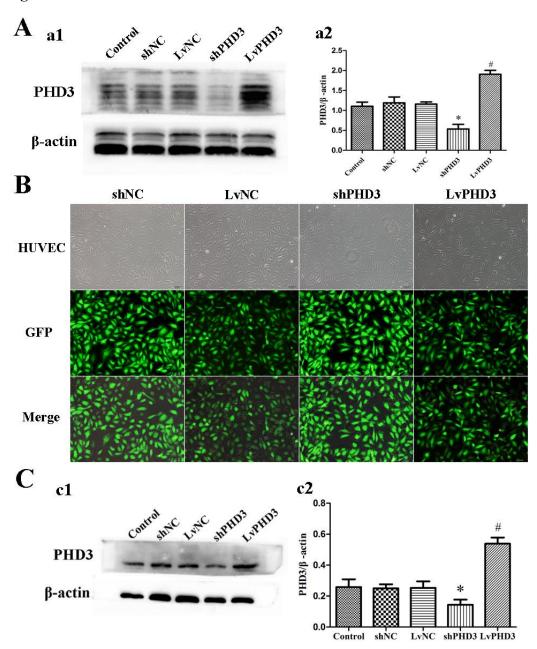


Figure S3.

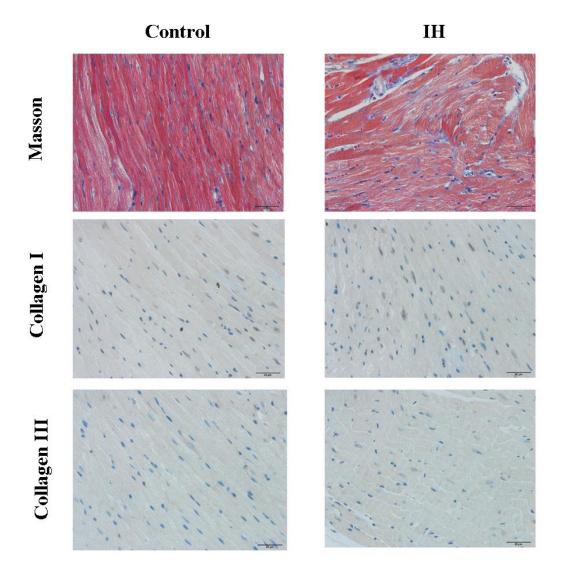


Figure S4.

