

1 Supplementary Figure legends

2

3 Supplementary Figure 1. PCR assays was used to identify the genotype of *FNDC5* knockout (KO)
4 and overexpression (OV) mice.

5 A. The genotyping of irisin-KO mice.

6 B. The genotyping of irisin-OV mice.

7

8 Supplementary Figure 2. Irisin deficiency or overexpression had no significant effect on lumen
9 radius of aortas in mice infused with saline or Ang II (490 ng/min/kg) for 4 weeks.

10 A. The H-E staining image of thoracic aorta tissues from irisin-KO, irisin-OV and WT mice
11 challenged with saline or Ang II (490 ng/min/kg) for 4 weeks. B. Lumen radius of aortas from irisin-
12 KO, irisin-OV and WT mice challenged with saline or Ang II (490 ng/min/kg) for 4 weeks (n =
13 8/group).

14 The data were presented as mean \pm S.E.M., and statistical analyses were performed by one way
15 ANOVA. *P < 0.05.

16

17 Supplementary Figure 3. The changes in the expression levels of α V/ β 5 and intracellular kinases in
18 VSMCs treated with irisin (20 nM) or Ang II (1 μ M) alone, or Ang II (1 μ M) in combination with
19 irisin (20 nM), respectively.

20 A. Changes in mRNA levels of α V and β 5 in VSMCs treated with irisin (20 nM) or Ang II (1 μ M)
21 alone, or Ang II (1 μ M) in combination with irisin (20 nM) for 24 h, respectively (n=3/group).

22 B. Changes in the expression levels of phosphorylation and total kinase proteins, including AKT,
23 ERK and JNK, in VSMCs challenged with irisin (20 nM) or Ang II (1 μ M) alone, or Ang II (1 μ M)
24 in combination with Ang II (1 μ M) for 24 h, respectively (n=3/group).

25 The data were presented as mean \pm S.E.M., and statistical analyses were performed by one way
26 ANOVA. **P < 0.01.

27

28 Supplementary Figure 4. The mRNA and protein expression distribution of *FNDC5* in smooth
29 muscle.

30 A. The mRNA expression overview of *FNDC5* in different organs from website of "The Human
31 protein Atlas".

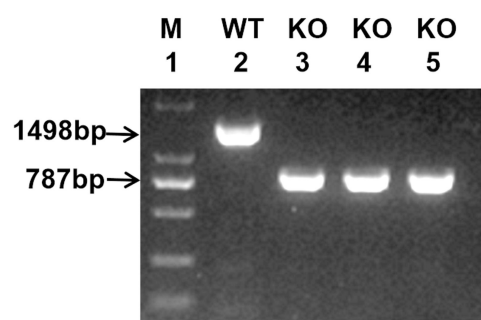
32 B. The protein expression overview of *FNDC5* in different organs from website of "The Human
33 protein Atlas".

34

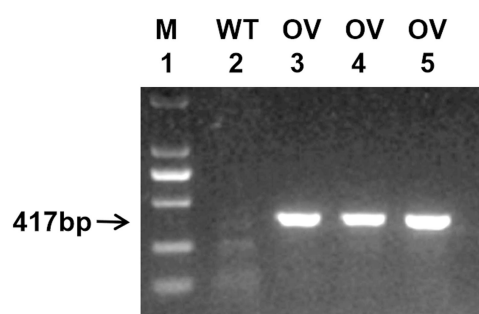
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Supplement Figure 1

A

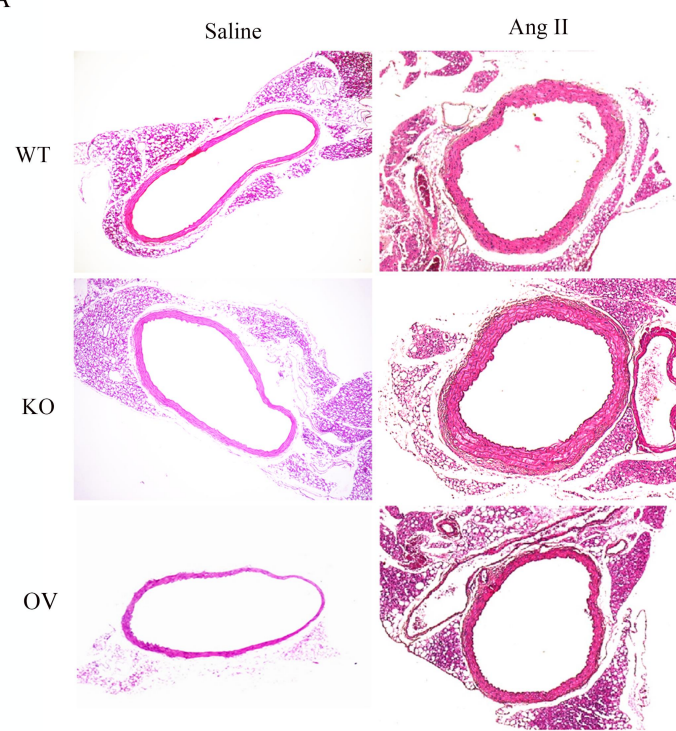


B

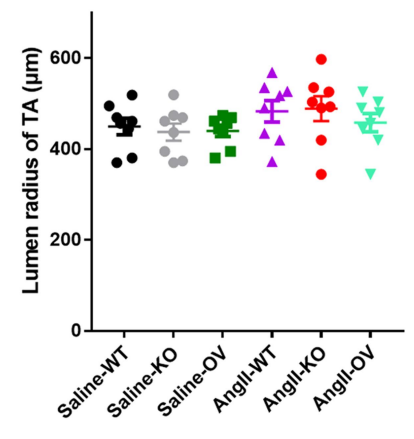


Supplement Figure 2

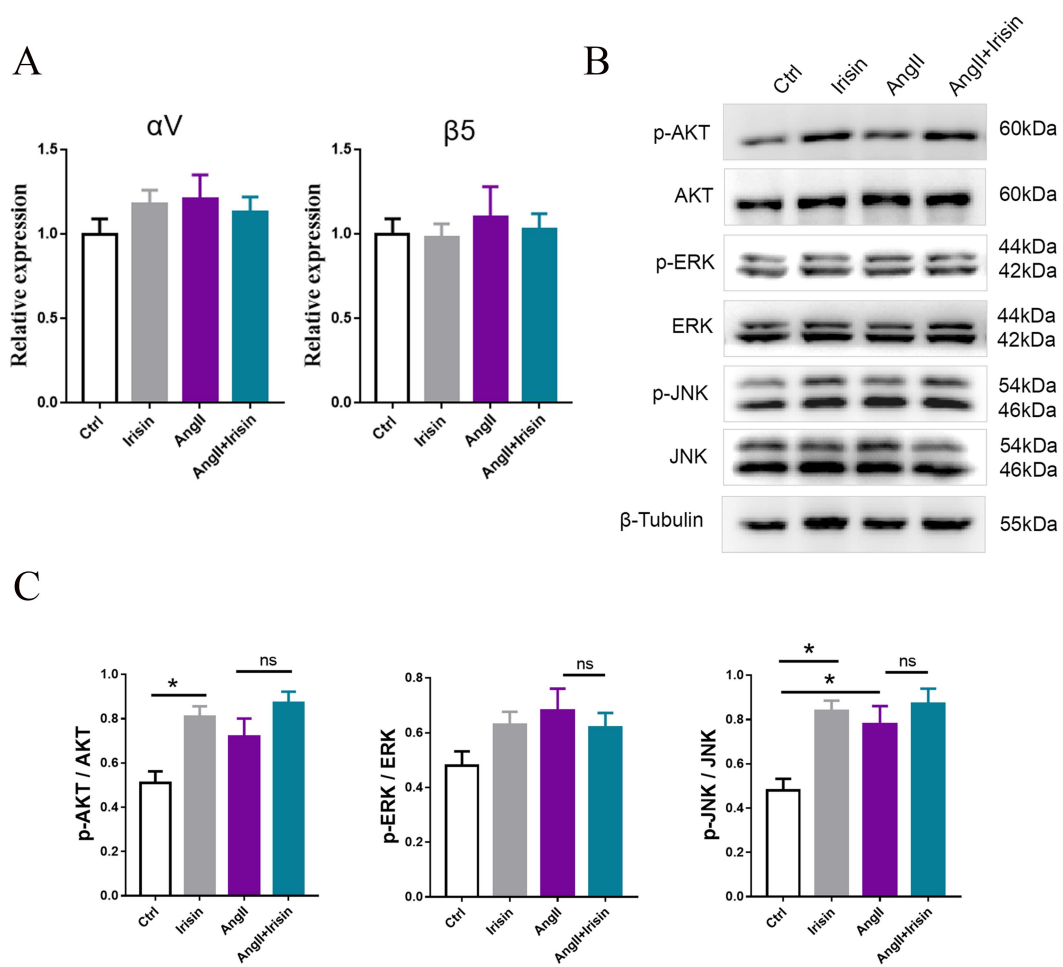
A



B



Supplement Figure 3



Supplement Figure 4

