Supplemental Materials

Molecular Biology of the Cell

Shi et al.

SUPPLEMENTAL MATERIALS

Olfactomedin 2, a novel regulator for transforming growth factor-β-induced smooth muscle differentiation of human embryonic stem cell-derived mesenchymal cells

Ning Shi, Xia Guo and Shi-You Chen

Department of Physiology & Pharmacology, University of Georgia, Athens, GA 30602

Supplemental Figure 1

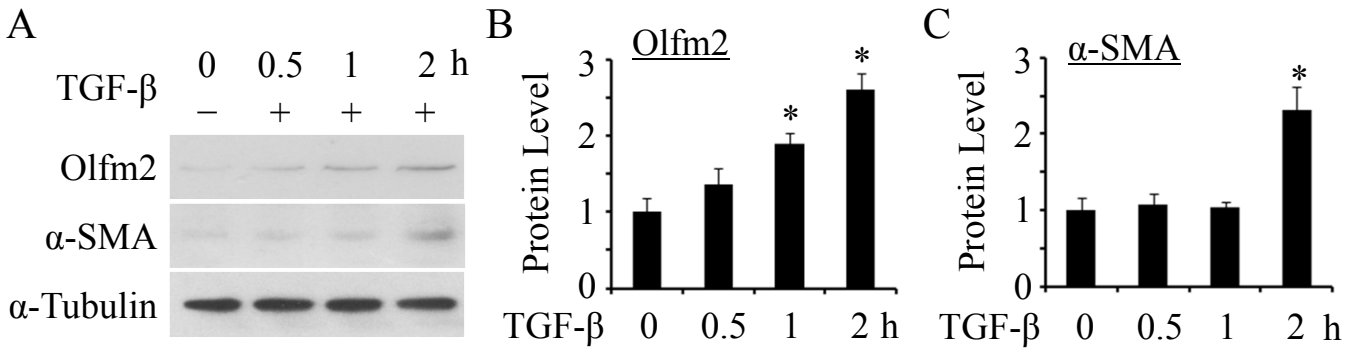

Fig. S1: Olfm2 was induced earlier than α-SMA. hES-MCs were treated with TGF-β1 for 0.5, 1, or 2 h. Western blot (A) was performed to detect Olfm2 (A and B) and α-SMA (A and C) protein expression as indicated and quantified by normalizing to α-Tubulin (B and C). *, $p<0.01$ compared to vehicle-treated group (0 h) for Olfm2 (B) and α-SMA (C), respectively. n=3.

Supplemental Figure 2

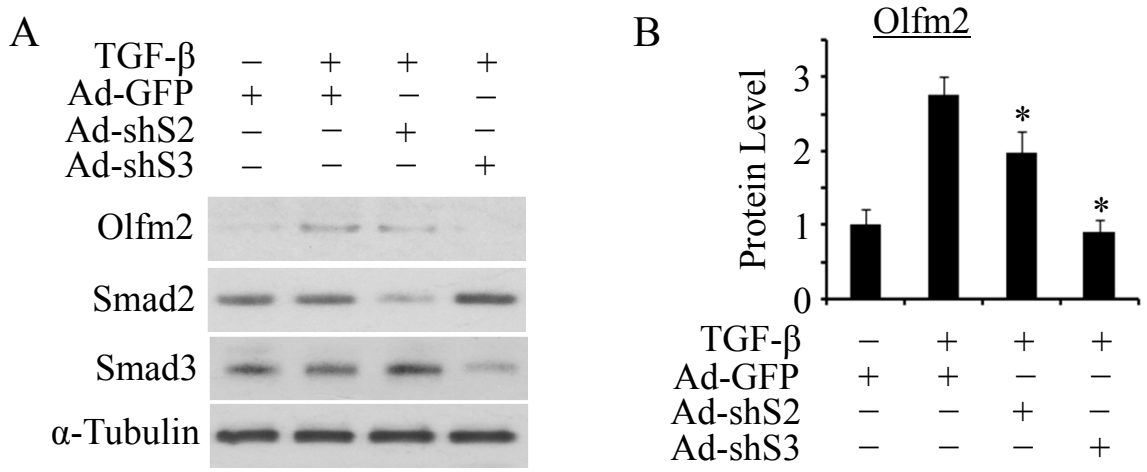

Fig S2: Olfm2 expression was Smad2/3-dependent. Smad2/3 expression in hES-MCs were knocked down by Smad2 (Ad-shS2) and Smad3 shRNA (Ad-shS3), respectively, followed by TGF-β1 (1 ng/ml) treatment for 24 h. Olfm2, Smad2 and Smad3 protein expression were detected by western blot (A) and quantified by normalizing to α-Tubulin. Smad3 knockdown completely inhibited TGF-β-induced Olfm2 expression, while Smad2 knockdown significantly reduced Olfm2 expression. *, $p<0.01$ compared to control shRNA (Ad-GFP)-transduced group with TGF-β1 treatment (n=3).

Supplemental Figure 3

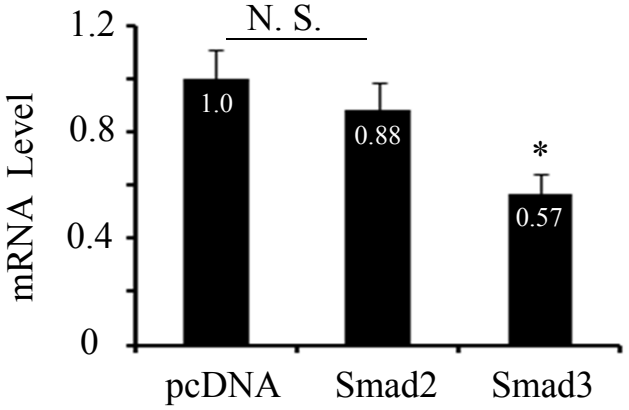

Fig S3: Smad3, but not Smad2, inhibited Herp1 expression. hES-MCs were transfected with control (pcDNA), Smad2, or Smad3 expression plasmid (3 μg) in 6-well plates. qRT-PCR were performed to detect Herp1 expression. *, $p<0.01$ compared to pcDNA group (n=3).