Supplemental Figure Legends

Figure 1. TGFβ1-induced miR143/145 expression. (A) Northern blot showing induction of miR143 and miR145. The 5S RNA demonstrates equal RNA loading. (B) Varying concentrations of TGFβ1 were applied to HCASM and the level of miR143 measured by qPCR.

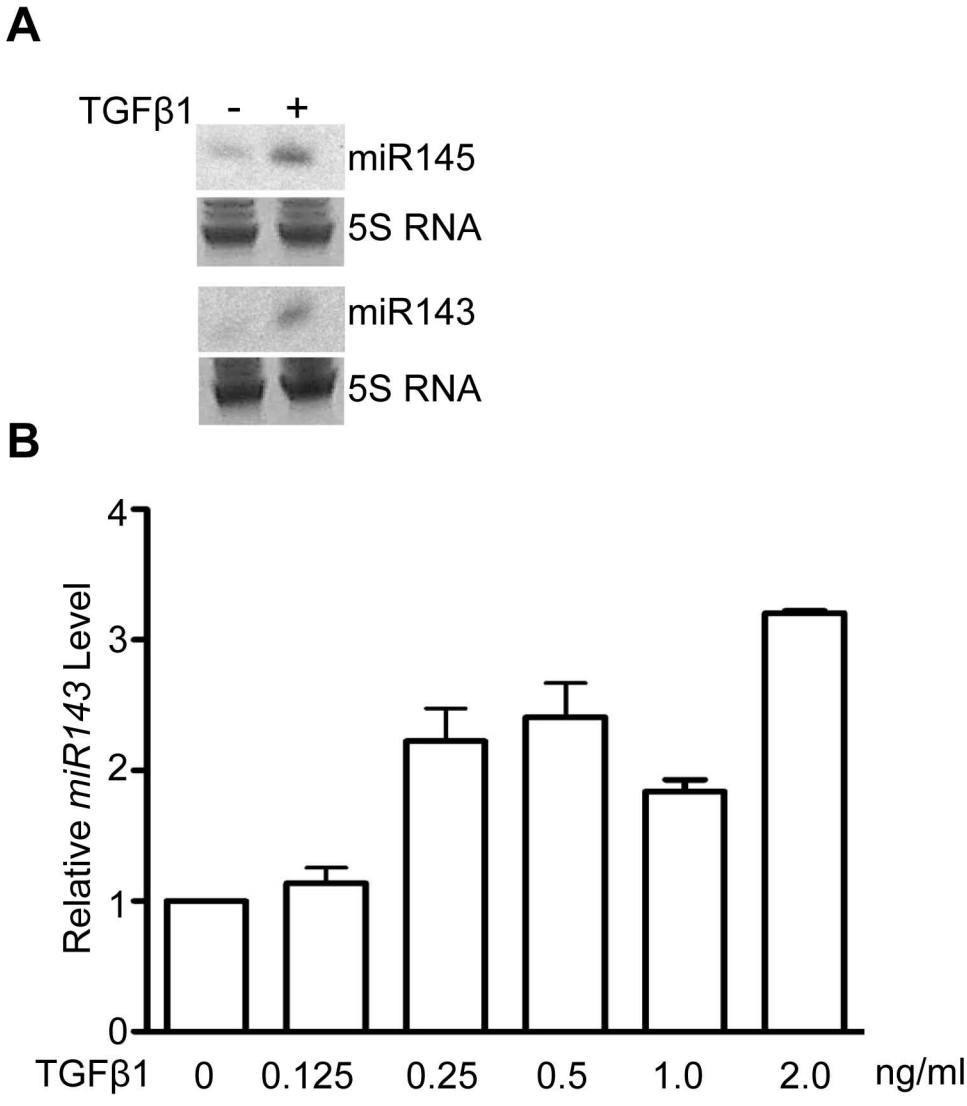
Figure 2. Effect of SB203580 compound on HSP27 activity and miR143 expression. (A) HCASM treated for indicated times with 1 ng/ml TGFβ1 in the absence or presence of 10 μM SB203580 and HSP27 protein levels measured by Western blot. Note complete inhibition of pHSP27 with SB203580 compound. (B) SB203580 dose-response effect on steady-state miR143 levels in HCASM treated with TGFβ1.

Figure 3. Effect of TGFβ1 on *KLF4* mRNA levels in HCASM. Cells were treated with 2 ng/ml TGFβ1 for 24 h (A) or 7 h (B) and *KLF4* mRNA measured by qPCR.

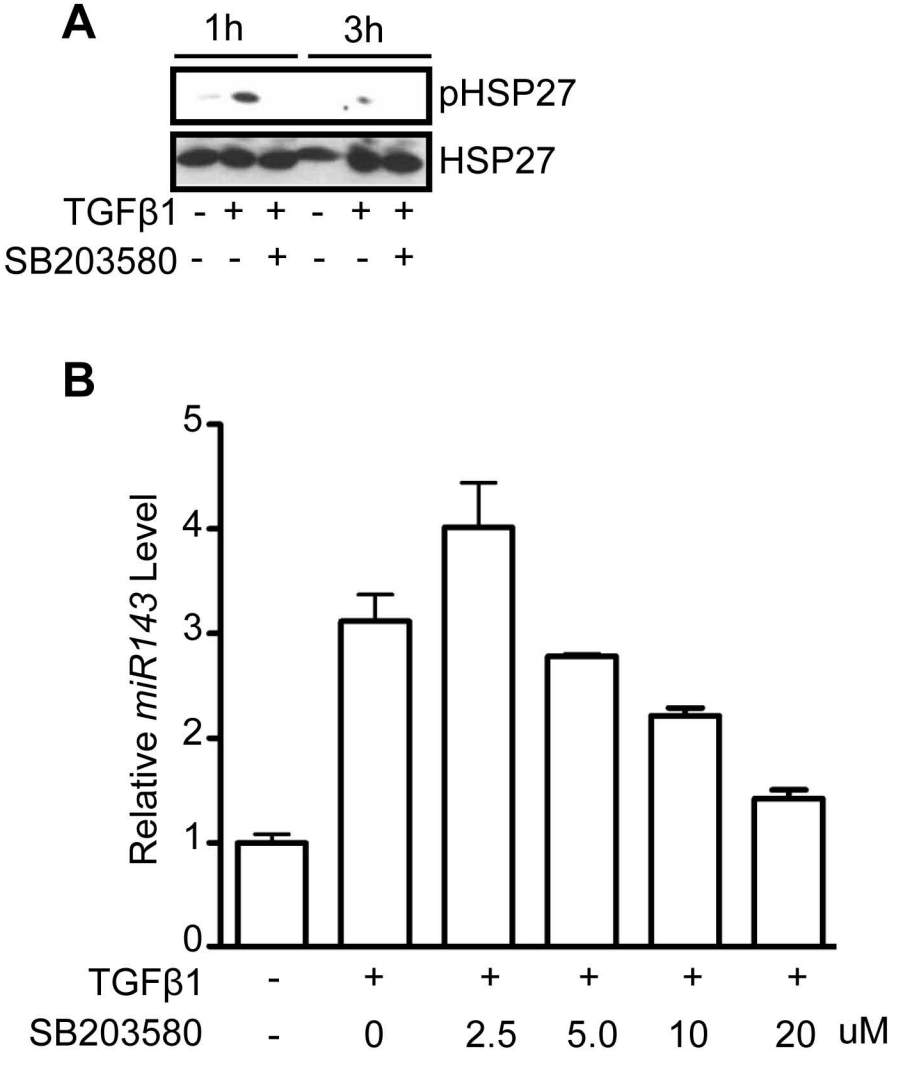
Figure 4. SMAD4-dependent regulation of MYOCD mRNA in TGFβ1 treated HCASM. HCASM were transfected with 30 nM siRNA (control scrambled or SMAD4) for 24 h followed by serum starvation overnight and then treated for 7 h with TGFβ1 or nothing. Total RNA was then extracted for qPCR as indicated.

Figure 5. SMAD3 interaction with the miR143/145 SBE enhancer region. Growing HCASM were serum starved overnight and then stimulated with 1 ng/ml TGFβ1 for 3 h before cells were processed for ChIP. The SBE region amplified corresponds to the primers yielding a 580 bp product (Supplemental Table).

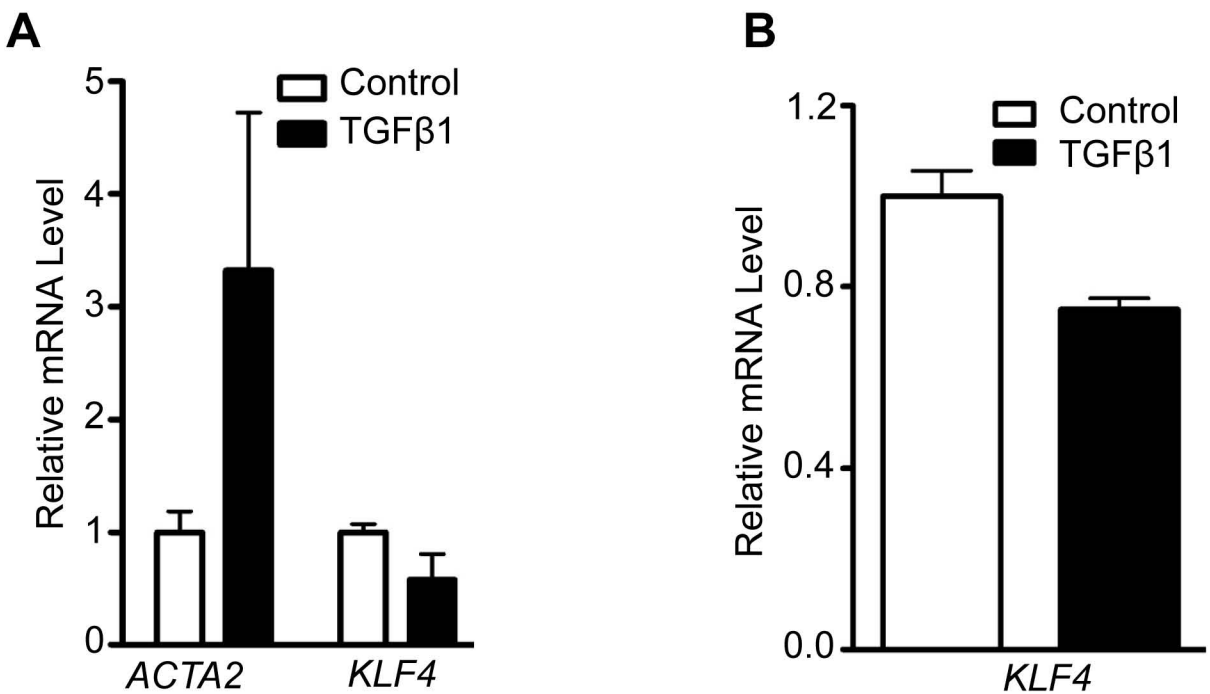
Long and Miano Supplemental Figure 1



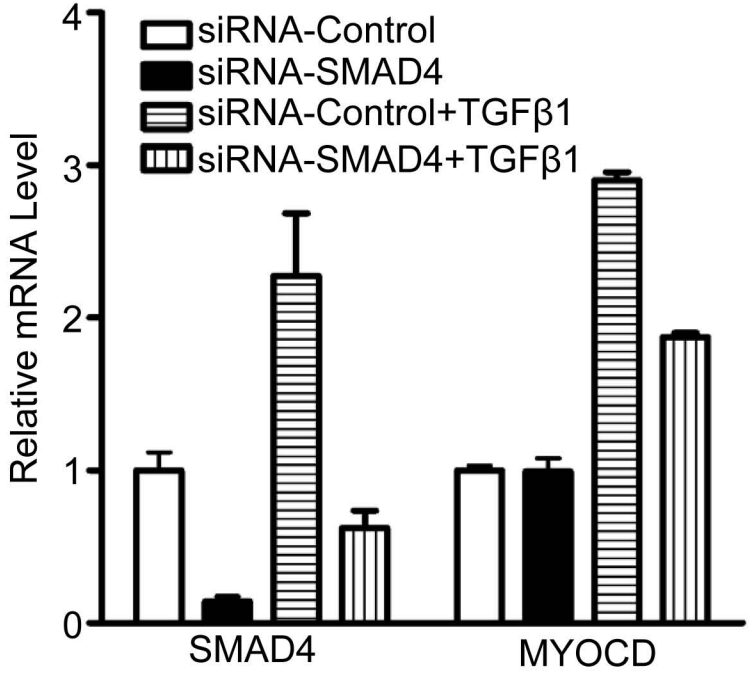
Long and Miano Supplemental Figure 2



Long and Miano Supplemental Figure 3



Long and Miano Supplemental Figure 4



Long and Miano Supplemental Figure 5