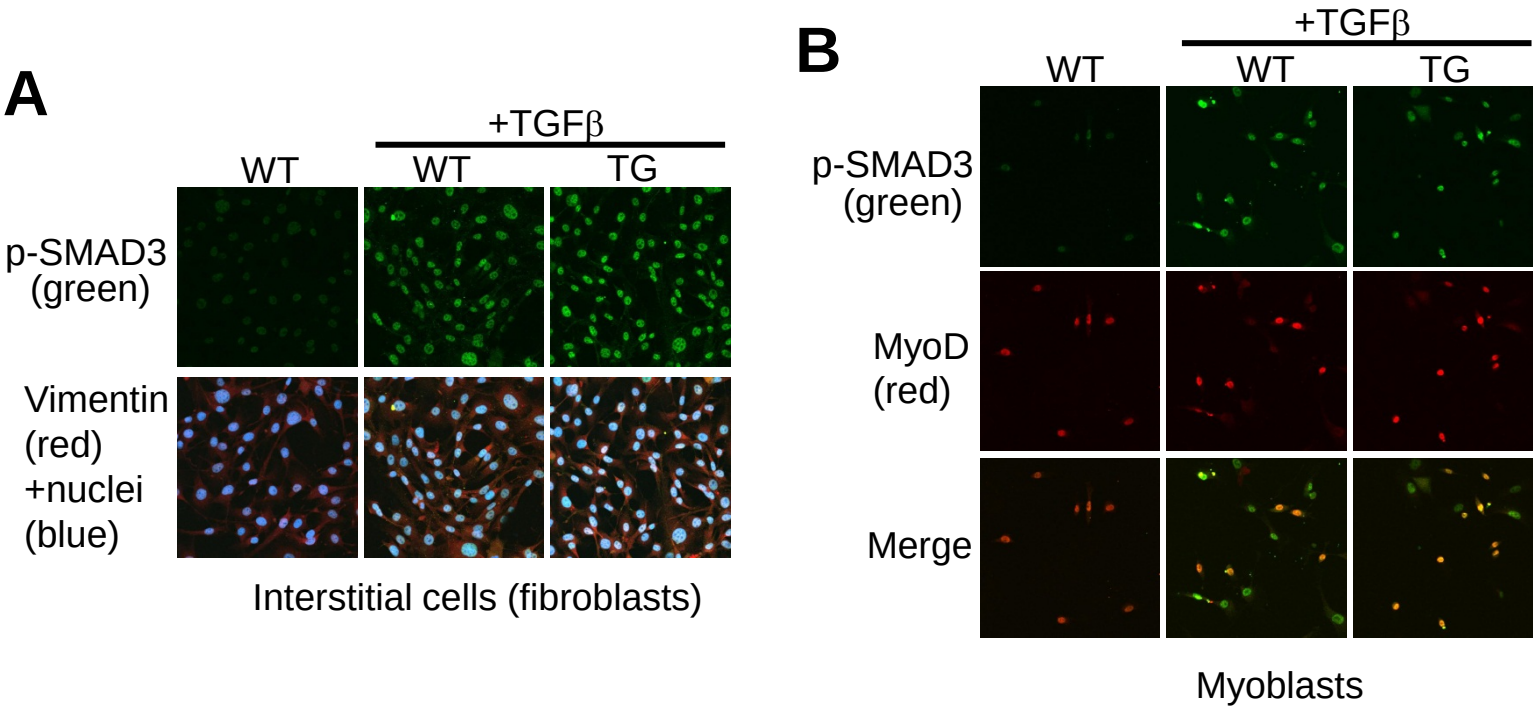

Figure S1. Addressing the cellular specificity of the dnTGFβRII transgene. (**A**) interstitial cells isolated from EDL myofibers from WT or TG mice were plated and stimulated with TGFβ or vehicle for 20 minutes, then processed for immunohistochemistry for SMAD3 phosphorylation (green) and accumulation in the nucleus. Vimentin staining (red) suggests that most of these cells are likely fibroblasts (lower panels) and nuclei are also shown in blue. The data show that SMAD3 is readily activated in interstitial cells isolated from the dnTGFβRII mice. (**B**) Similar to panel A, isolated myoblasts also show no inhibition of SMAD3 activation when isolated from dnTGFβRII muscle. MyoD is a control showing myoblast identity in these cultures.

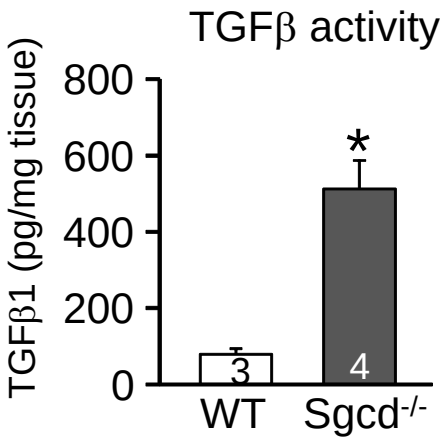

Figure S2. TGFβ is activated in MD. TGFβ induction was measured by ELISA from quadriceps muscle extracts of Sgcd$^{-/-}$ or wild-type (WT) mice. *P < 0.05 versus WT. Number of mice used is shown in the graph.

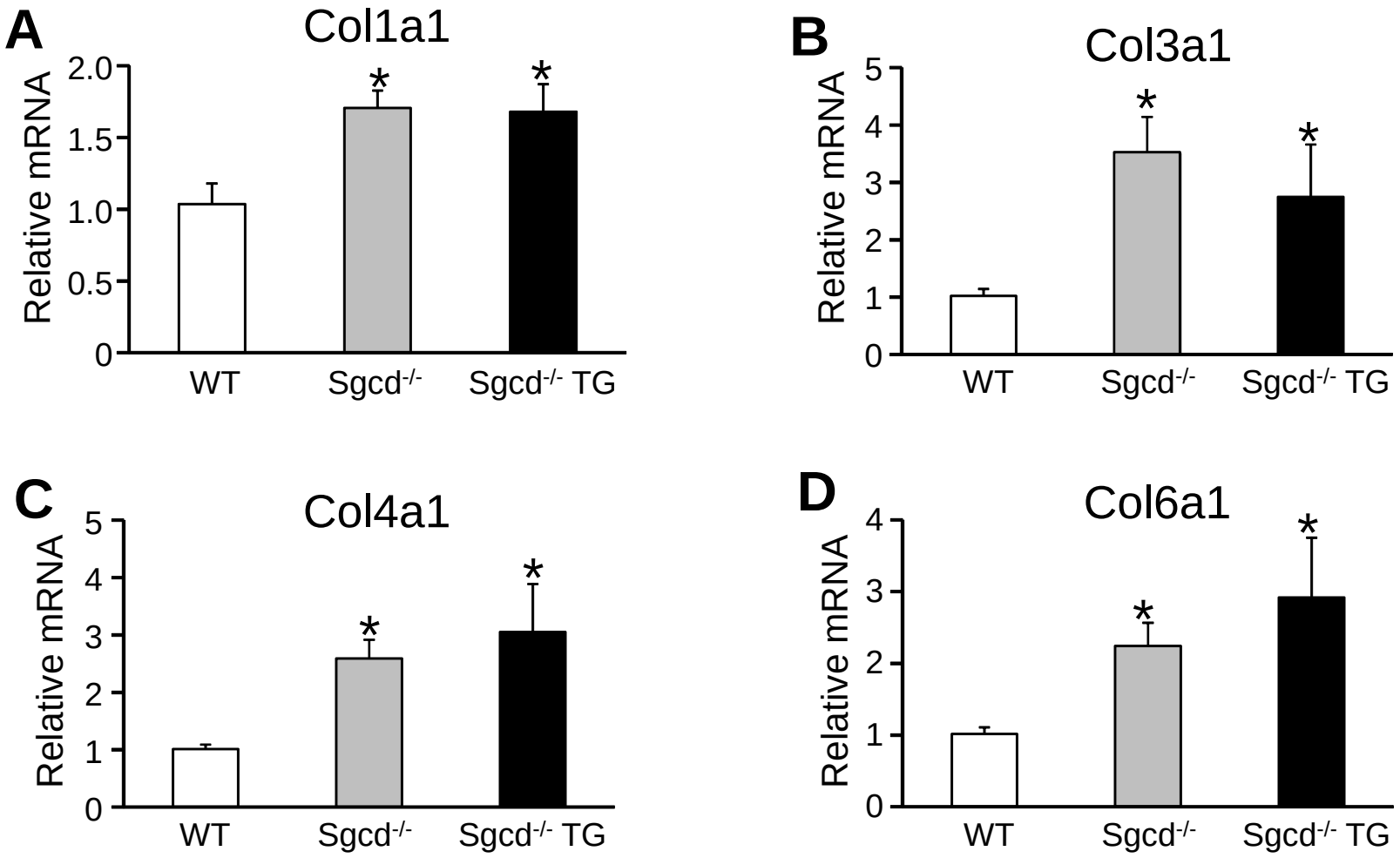

Figure S3. Collagen mRNA expression analysis. Real-time PCR from quadriceps muscle of WT, Sgcd$^{-/-}$ and Sgcd$^{-/-}$ TG mice for (**A**) Collagen 1a1 (Col1a1), (**B**) Collagen 3a1 (Col3a1), (**C**) Collagen 4a1 (Col4a1) and (**D**) Collagen 6a1 (Col6a1). mRNA expression was normalized to Rpl7 control mRNA. *P < 0.05 versus WT. N=3 for each genotype.

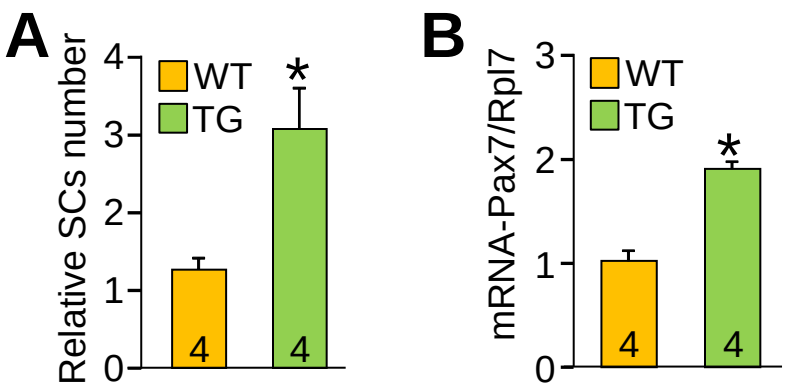

Figure S4. Quantification of satellite cell number. (**A**) Quantification of satellite cell number per EDL fiber by double immunostaining with the markers Pax7 and CD34. (**B**) Real-time PCR from TA muscle for Pax7 mRNA expression normalized to Rpl7 control mRNA. *P < 0.05 versus WT control. Number of mice used is shown in the bars of each panel.