Supplementary Materials

Pim1 Maintains Telomere Length in Mouse Cardiomyocytes by Inhibiting TGFβ Signaling

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Figure S1

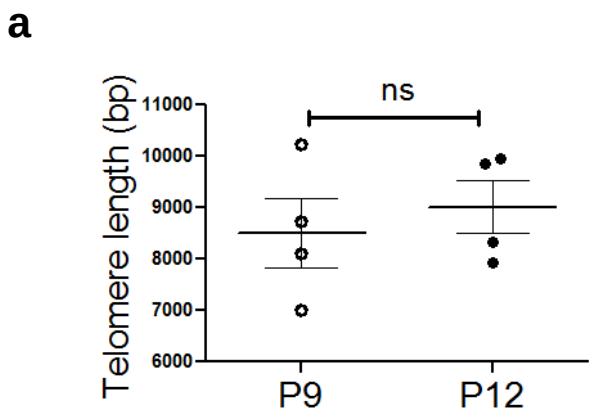

Figure S1: A549 cells maintain telomeres in culture. a Telomere lengths of A549 cells after 3 passages in culture measured by qPCR. N=4, Mean ± SEM, Student *t* test.

Figure S2

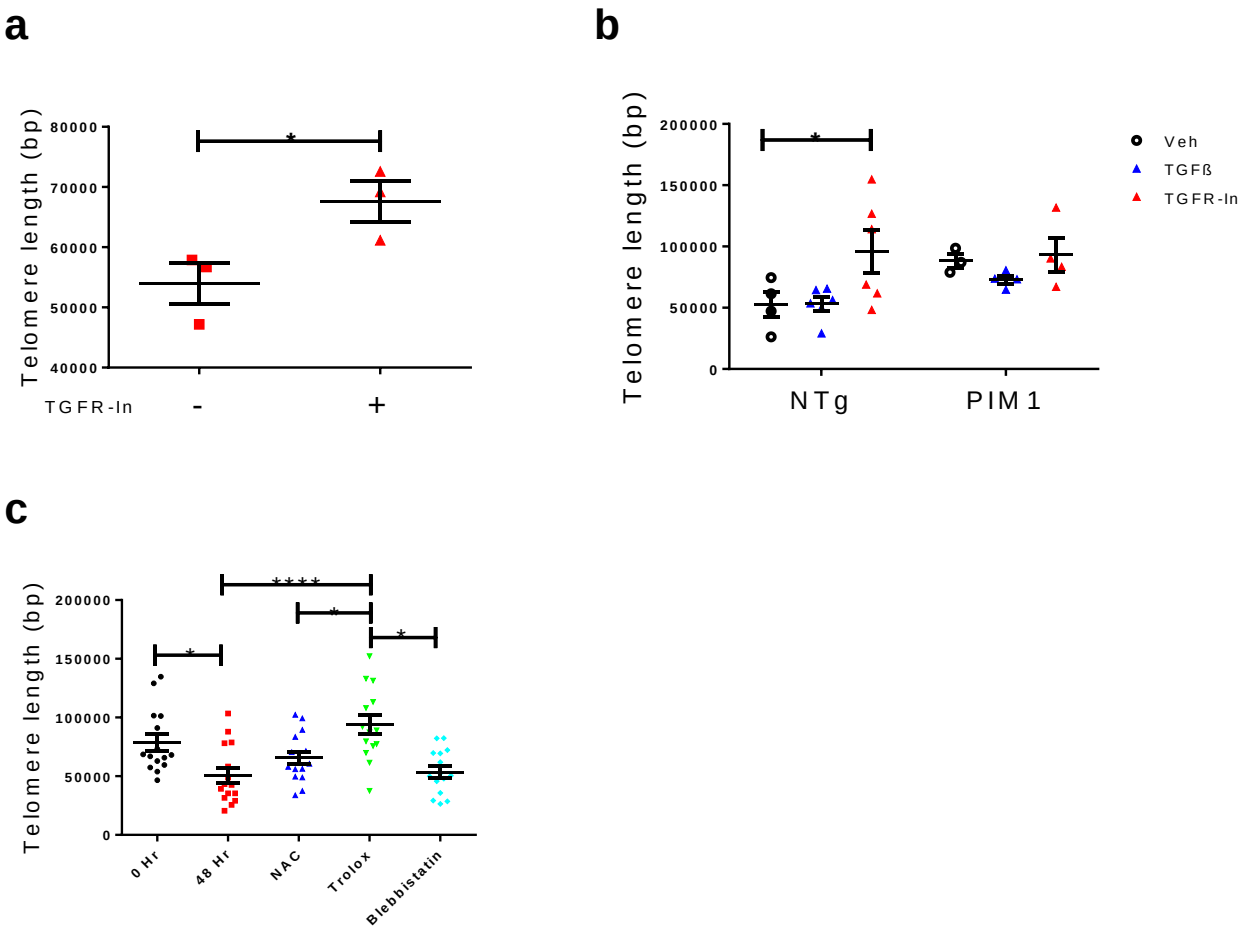

Figure S2: **Pharmacological maintenance of telomeres**. **a** Telomere lengths of Pim1-KO cardiomyocytes after treatment with TGFR-In for 48 hours. N=3, Mean ± SEM, *p<0.05 as measured by Student *t* test. **b** Telomere lengths of NTg or PIM1 cardiomyocytes treated with TGFβ or TGFR-In for 48 hours. N=3-6 per group, Mean ± SEM, *p<0.05 as measured by 1-way ANOVA followed by Tukey's multiple comparison test. **c** Telomere lengths of cardiomyocytes at 0 hours or after 48 hours of culture with NAC, trolox, or blebbistatin. N=3 biological x 5 technical replicates, Mean ± SEM, *p<0.05, ****p<0.0001 as measured by 1-way ANOVA followed by Tukey's multiple comparison test.

Figure S3

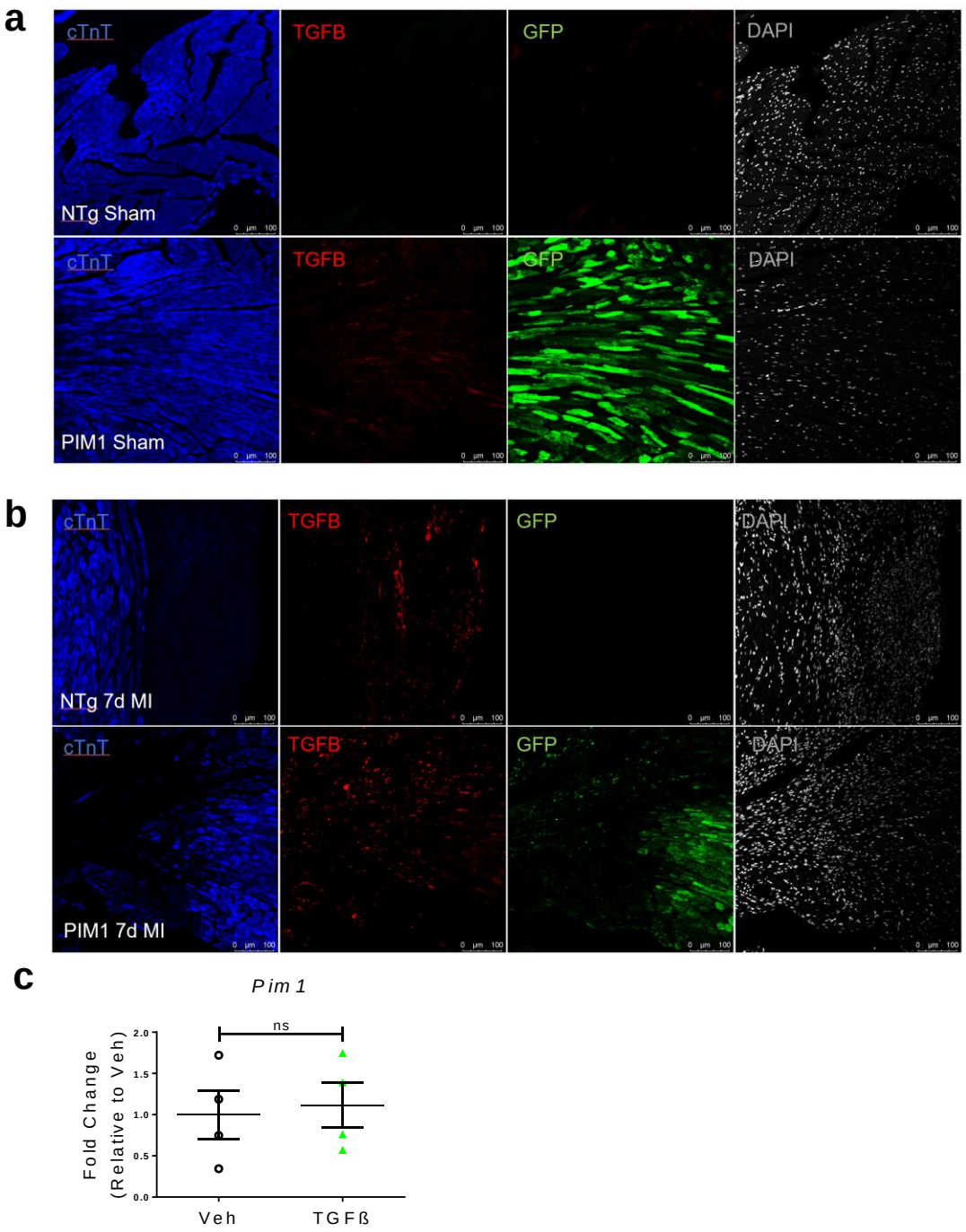

Figure S3: Pim1 and TGFβ do not exhibit feedback relationships. a TGFβ expression in heart sections from sham animals and **b** 7 days post MI. **c** *Pim1* expression in NTg cardiomyocytes after treatment with TGFβ for one hour measured by qPCR. N=4, Mean ± SEM, Student *t* test.

Figure S4

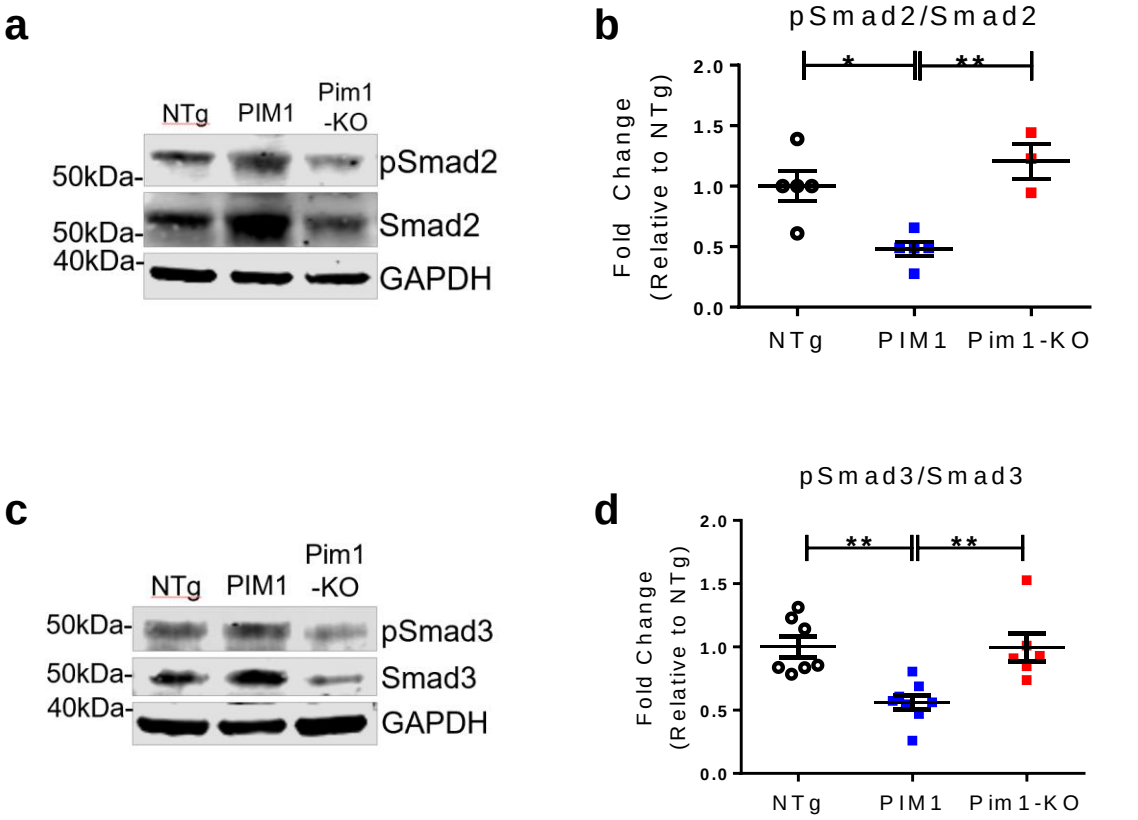

Figure S4 Phosphorylation of Smads is blunted by PIM1 in cardiomyocytes. a Western blot image of pSmad2 and total Smad2 in NTg ,PIM1, and Pim1-KO cardiomyocytes. **b** Quantification of pSmad2 over total Smad2 protein expression in cardiomyocytes. N=3-5 per group, Error bars represent SEM, *p<0.05, **p<0.01 as measured by 1-way ANOVA followed by Tukey's multiple comparison test. **c** Immunoblot image of pSmad3 and total Smad3 in cardiomyocytes with **d** respective quantification. N=6-8 per group, Error bars represent SEM, **p<0.01 as measured by 1-way ANOVA followed by Tukey's multiple comparison test.