Figure S1. Identity of cultured smooth muscle cell verified by α-SMA and SM22α IF staining. (A) IF staining of α-SMA. Scale bar, 100 μm. (B) IF staining of SM22α. Scale bar, 50 μm. DAPI, 4',6-diamidino-2-phenylindole; α-SMA, smooth muscle α-actin; SM22α, smooth muscle protein 22-α; IF, immunofluorescence.

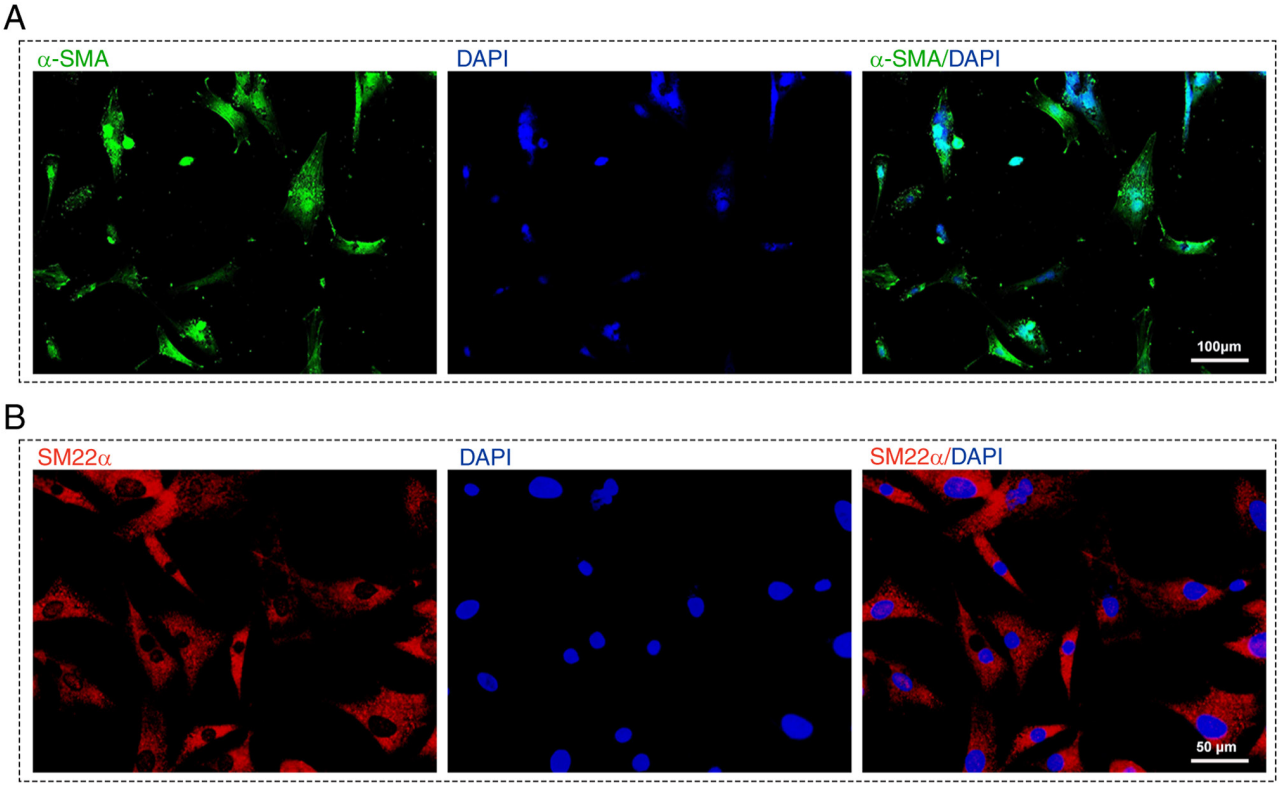

Figure S2. Proof of infection success. SPINT2 (A) mRNA and (B) protein expression levels in adenovirus-infected cells were detected to confirm transduction efficiency. ***P<0.001. SPINT2, serine peptidase inhibitor Kunitz type 2.

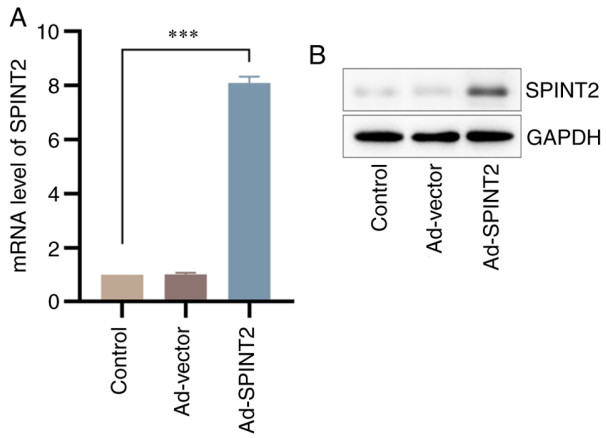

Figure S3. SPINT2 overexpression has no significant effects on SMC viability or phenotypic switching. (A) The SMC viability at 48 h was detected using the 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide assay. (B) The expression levels of the synthetic proteins (vimentin and collagen I) were detected by western blotting. (C) The expression levels of the contractile proteins (α-SMA and SM22α) were detected by western blotting. α-SMA, smooth muscle α-actin; SM22α, smooth muscle protein 22-α; SPINT2, serine peptidase inhibitor Kunitz type 2; SMC, smooth muscle cell; Ad, adenovirus.

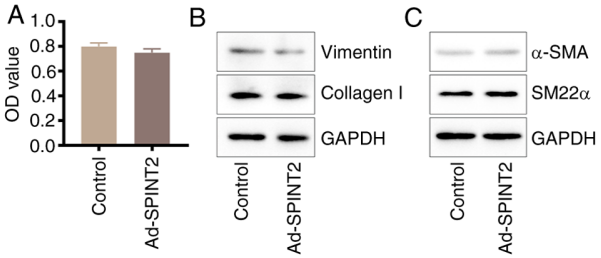

Figure S4. Effects of SPINT2 on the protein level of PDGFRβ. **P<0.01 vs. control group. ##P<0.01 vs. PDGF-BB + Ad-vector group. PDGF-BB, platelet-derived growth factor BB; SPINT2, serine peptidase inhibitor Kunitz type 2; PDGFR β, PDGF receptor β; Ad, adenovirus.