

Figure S1. Transfection efficiencies of si-ADAMTS5, ADAMTS5 overexpression vector and si-SP1. (A) Western blotting was used to test ADAMTS5 protein expression in CHON-001 cells transfected with si-NC/si-ADAMTS5. (B) ADAMTS5 protein expression in CHON-001 cells transfected with pcDNA/ADAMTS5 was examined by western blotting. (C) SP1 protein expression was detected by western blotting in primary chondrocytes transfected with si-NC/si-SP1. (D) ADAMTS5 protein expression was measured using western blotting in primary chondrocytes transfected with pcDNA/ADAMTS5. \*\*\*P<0.001. NC, negative control; SP1, specific protein.

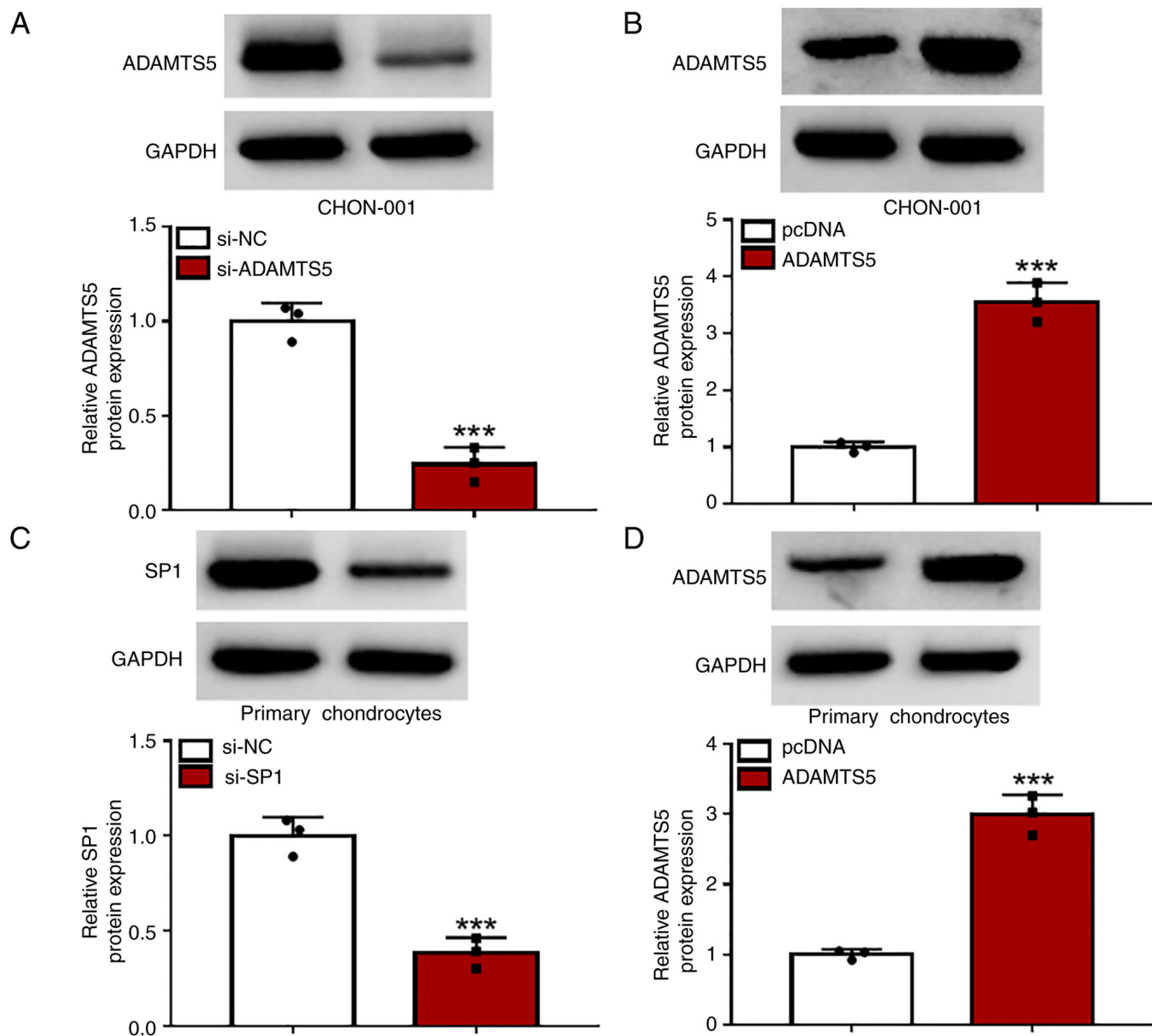


Figure S2. Effects of si-SP1 and ADAMTS5 on IL-1 $\beta$ -induced primary chondrocyte injury. Primary chondrocytes were transfected with si-NC/si-SP1/pcDNA/ADAMTS5 followed by treatment with IL-1 $\beta$ . (A) ADAMTS5 protein expression was tested using western blotting. (B) Cell proliferation was examined using MTT assay. (C) Results of statistical analysis of apoptosis rate using flow cytometry. (D) Results of flow analysis. (E) IL-6 and TNF- $\alpha$  concentrations were assessed using ELISA. (F) SOD activity and (G) MDA levels were examined by the corresponding kits. \* $P$ <0.05, \*\* $P$ <0.01, \*\*\* $P$ <0.001 and \*\*\*\* $P$ <0.0001. NC, negative control; SP1, specific protein 1; SOD, superoxide dismutase; MAD, malondialdehyde

