Supplementary data

Smooth Muscle-specific HuR Knockout Induces Defective Autophagy and Atherosclerosis

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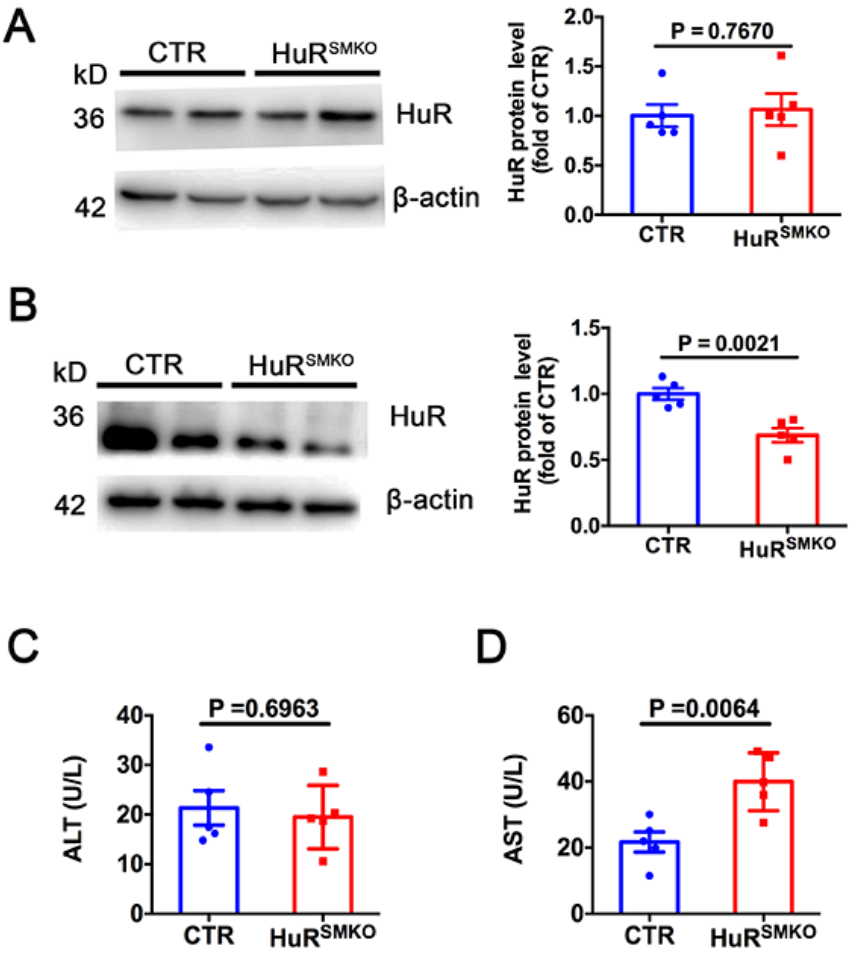
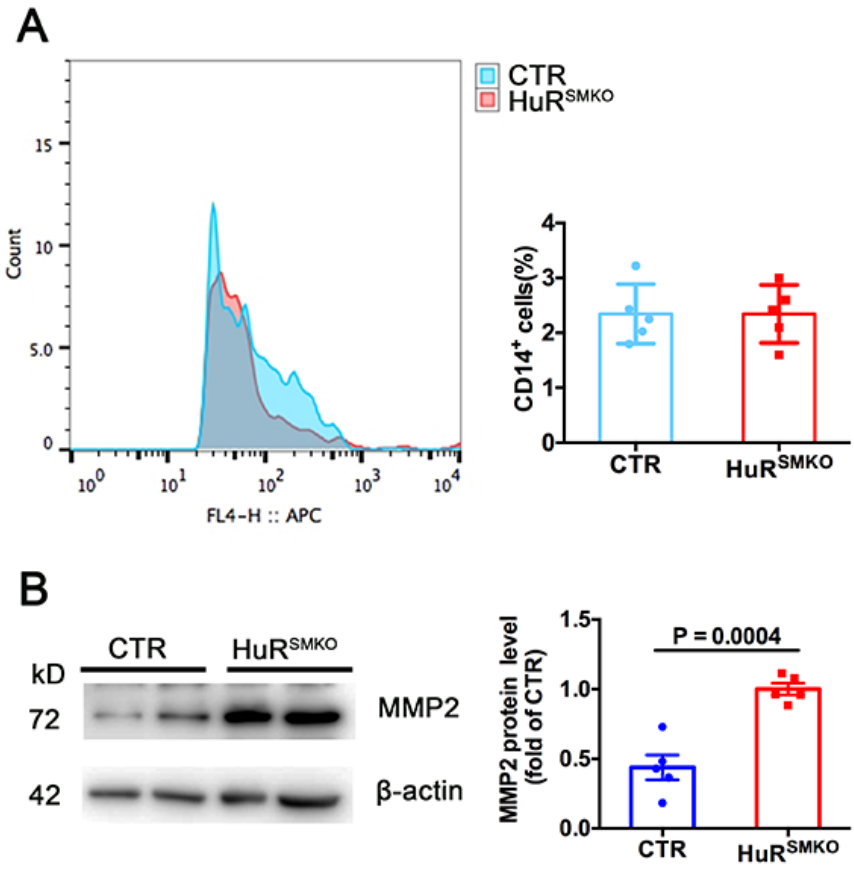
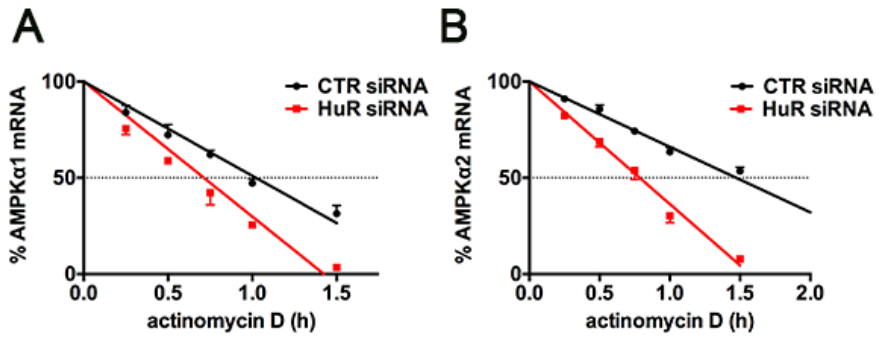


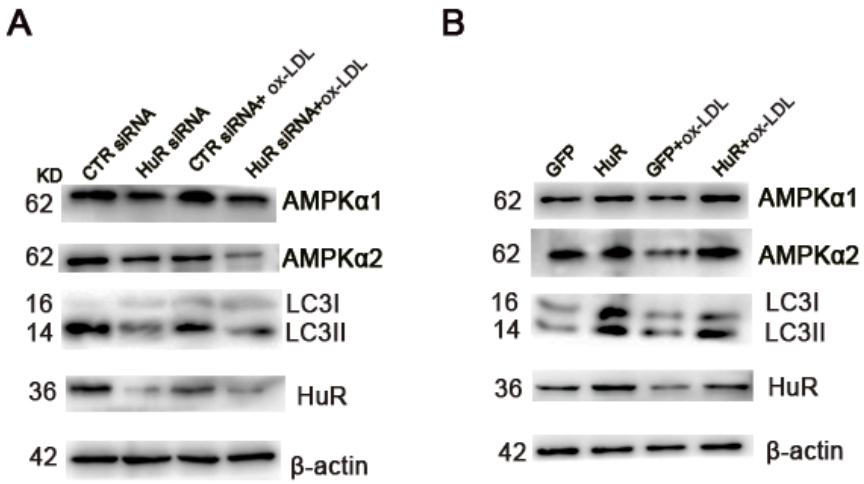
Supplementary Fig. 1. HuR expression in hepatocytes and liver fibroblasts from CTR and HuR^{SMKO} mice. A, Western blot analysis of HuR expression in hepatocytes from CTR and HuR^{SMKO} mice (n=5). **B,** Western blot analysis of HuR expression in liver fibroblasts from CTR and HuR^{SMKO} mice (n=5). **C-D,** Measurement of serum aspartate transaminase (AST) and alanine transaminase (ALT) from CTR and HuR^{SMKO} mice (n=5).



Supplementary Fig. 2. HuR deletion did not change total monocytes but increased MMP2 expression. CTR and HuR^{SMKO} mice were injected with rAAV/D377Y-mPCSK9 and fed a paigen diet. **A,** Monocytes were labeled with CD14 and then detected by whole blood flow cytometry. Representative images were shown and monocytes were analyzed (n=5). **B,** Western blot analysis of MMP2 expression in aortas from CTR and HuR^{SMKO} mice (n=5).



Supplementary Fig. 3. The stability of AMPKα1 and AMPKα2 mRNAs decreased by HuR deficiency. A-B, VSMCs were transfected with CTR siRNA or HuR siRNA and then treated with actinomycin D (5 μg/ml). Quantified RT-PCR analysis of mRNA levels of AMPKα1 (**A**) and AMPKα2 (**B**) in VSMCs (n=5).



Supplementary Fig. 4. HuR regulates AMPKα expression in oxLDL-stimulated SMCs. A, Western blot analysis of AMPKα1, AMPKα2, LC3II in VSMCs transfected with CTR siRNA or HuR siRNA followed by oxLDL treatment for 24 hrs. **B,** Western blot analysis of AMPKα1, AMPKα2, LC3II in VSMCs infected with adenovirus-expressing GFP or HuR followed by oxLDL treatment for 24 hrs.