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Supplemental information

Syndecan-1 shedding destroys epithelial adherens junctions through STAT3 after renal ischemia/reperfusion injury

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Supplementary Information

Contents

Figure S1: GM6001 pre-treatment had no influence on the renal function of sham mice

Figure S2: The identify of wild-type (SDC-1^{fl/fl}/Cre⁻) mice and tubule-specific knockout mice (SDC-1^{fl/fl}/Cre⁺)

Figure S3: The marker of primary mouse proximal tubular cells

Figure S4: S3I-201 could inhibited the expression of phosphorylated STAT3

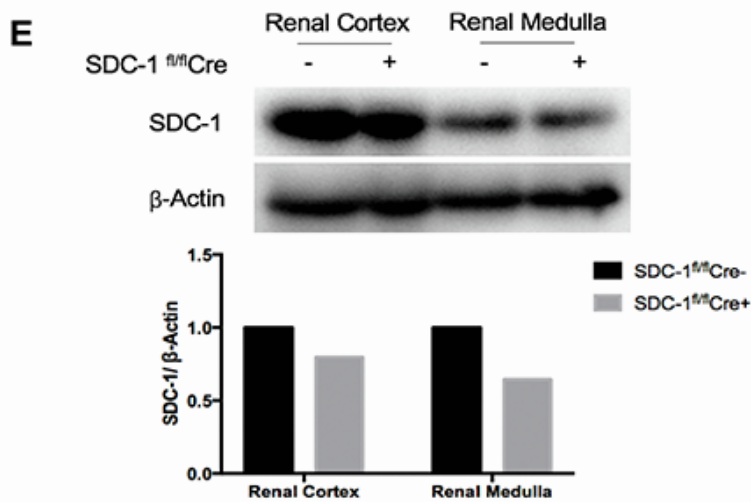
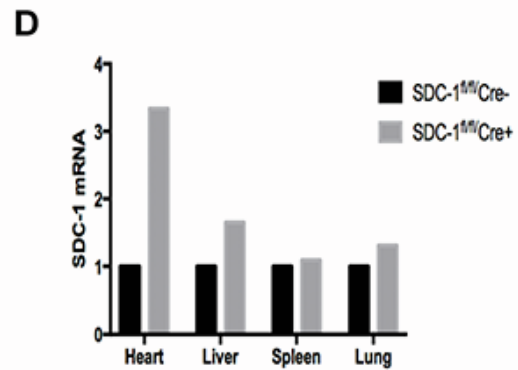
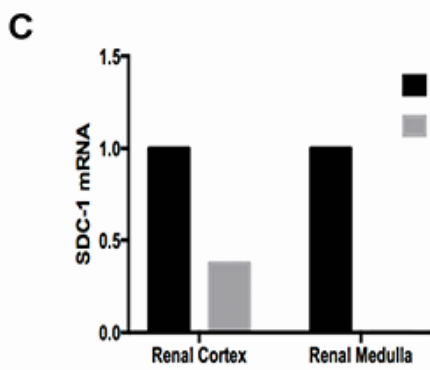
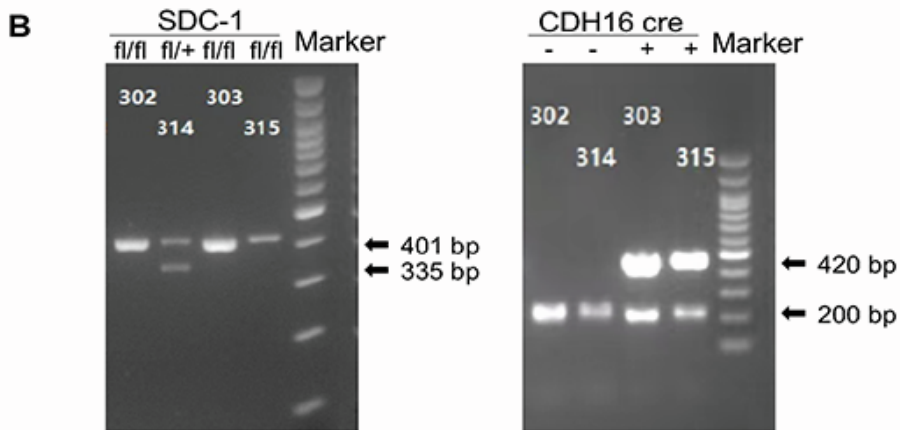
Figure S5: The mRNA expression of SDC-1 in MDCK cells after being knock-down. by the SiRNA

Supplemental Figure 2. The identify of wild-type (SDC-1^{fl/fl}/Cre⁻) mice and tubule-specific knockout mice (SDC-1^{fl/fl}/Cre⁺). Related to Figure 3. (A) Construction method of tubule-specific knockout SDC-1 mice. (B) The mice tail DNA were validated by PCR results. The PCR product of SDC-1^{fl/fl} mice was 401 bp, wild type was 335 bp, heterozygous type was 401 bp and 335 bp. The PCR product of CDH16-Cre was 420 bp, and the PCR product of internal positive control was 200 bp. We took the genotypes of mice 302, 314, 303 and 315 as examples: The genotypes of mice 302, 303 and 315 were SDC-1^{fl/fl}, and the genotypes of mice 303 and 315 were CDH16-Cre. Therefore, the genotypes of mice 303 and 315 were SDC-1^{fl/fl}/Cre⁺. (C) Expression levels of SDC-1 mRNA in renal cortex and medulla of knockout mice, n=1. (D) Expression level of SDC-1 mRNA in heart, liver, spleen and lung of knockout mice, n=1. (E) Protein expression level of SDC-1 in renal cortex and medulla of knockout mice, n=1.

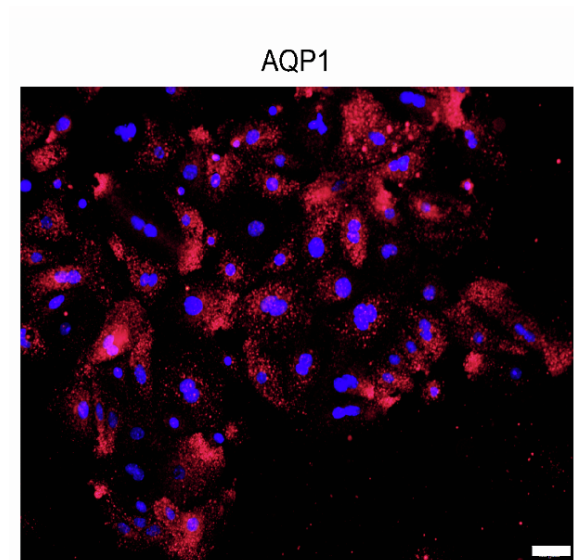
A SDC-1^{fl/fl} × CDH16-Cre



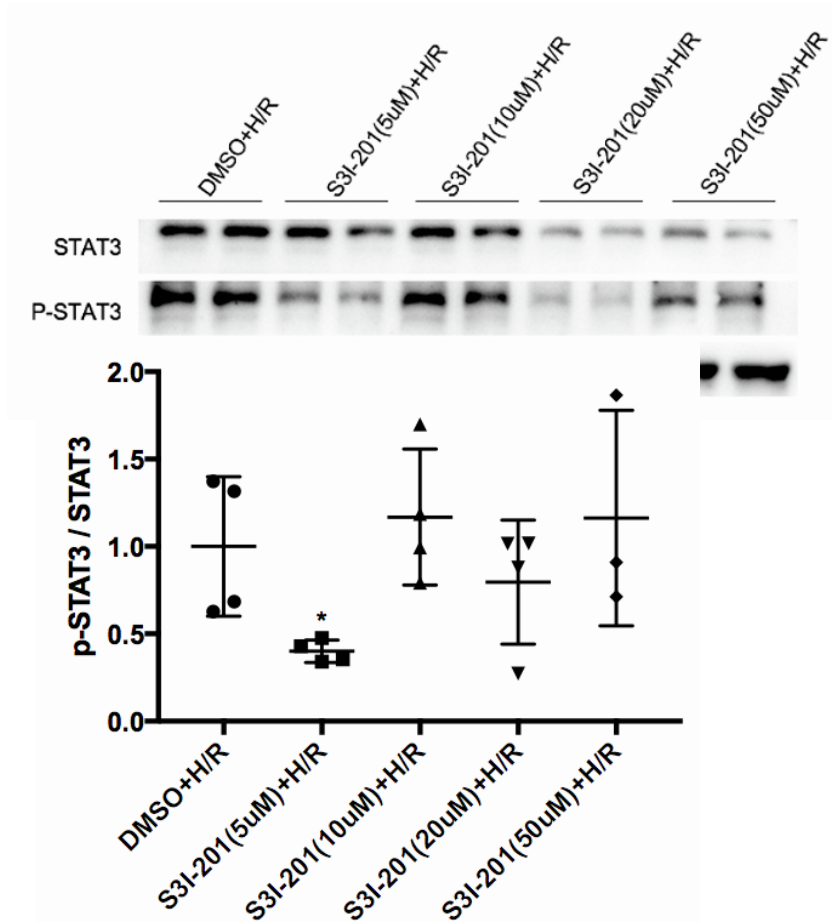
SDC-1^{fl/fl}/Cre⁺



Supplemental Figure 3. The marker of primary mouse proximal tubular cells.
Related to Figure 3. Related to STAR Methods (EXPERIMENTAL MODEL AND
STUDY PARTICIPANT DETAILS). We used AQP1 to mark the proximal tubule.
Bar=50 μ m.



Supplemental Figure 4. S3I-201 could inhibited the expression of phosphorylated STAT3. Related to Figure 4. The activation of STAT3 could be inhibited by S3I-201 efficiently at 5 μ M in the H/R treated PTECs. *P<0.05 vs DMSO+H/R group. n=3-4.



Supplemental Figure 5. The mRNA expression of SDC-1 in MDCK cells after being knock-down by the SiRNA. Related to Figure 5. MDCK cells were transfected with negative SiRNA (Si-NC) or SDC-1 knockdown SiRNA (Si-SDC-1). **** $P < 0.01$** compared with Si-NC group, n=3.

