

Figure S1. Cardiac hypertrophy was induced by IS *in vitro*. Rat embryonic cardiomyoblast H9c2 cells were treated with (A) increasing concentrations of IS for 2 days or with (B) 500  $\mu$ M IS for indicated the periods. Total RNA was detected by reverse transcription-quantitative PCR to analyze the gene expression of cardiomyocyte hypertrophy markers, ANF, BNP and  $\beta$ -MHC. \* $P < 0.05$ , \*\* $P < 0.01$ , \*\*\* $P < 0.001$  vs. control. IS, indoxyl sulfate; ANF, atrial natriuretic factor; BNP, brain natriuretic peptide;  $\beta$ -MHC,  $\beta$ -myosin heavy chain; ns, not significant.

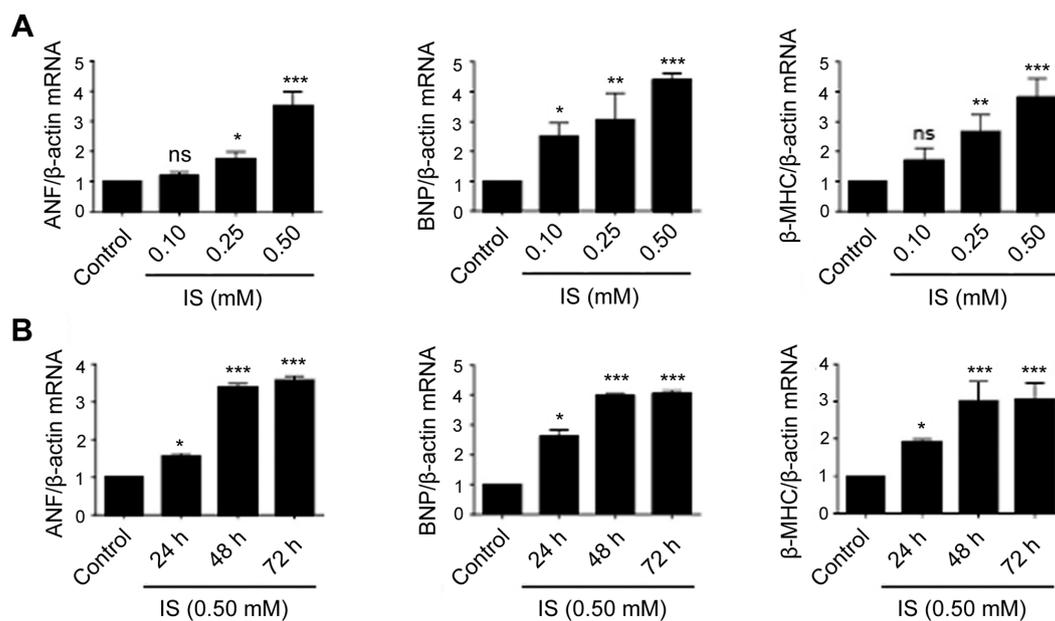


Figure S2. Gene expression of AhR induced by IS. Rat embryonic cardiomyoblast H9c2 cells were treated with CKD serum for 2 days. Total protein samples were isolated for (A) western blotting with an antibody against AhR and (B) subsequent densitometry. (C) Total RNA was isolated for reverse transcription-quantitative PCR to analyze the mRNA level of AhR. AhR, aryl hydrocarbon receptor; IS, indoxyl sulfate; ns, not significant; CKD, chronic kidney disease.

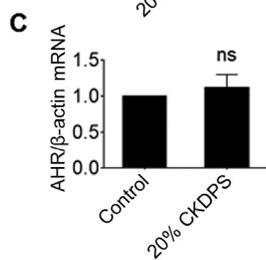
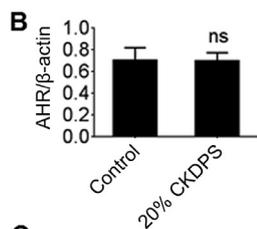
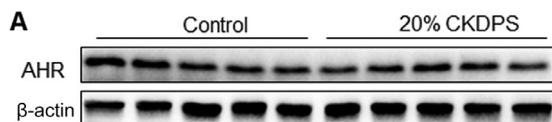


Table SI. Sequences of siRNA against CYP1B1, AhR and negative control (NC).

Target name	Target sequence
CYP1B1	5' GGAUGUGCCUGCCACUAUUTT 5' AAUAGUGGCAGGCACAUCCTT
AhR	5' GCAACAAAGGAUCGGGAUATT 5' UAUCCCGAUCCUUUGUUGCTT
NC siRNA	5' UUCUCCGAACGUGUCACGUTT 5' ACGUGACACGUUCGGAGAATT

Table SII. Primers for realtime PCR.

Target name	Sequence	Products (bp)
CYP1B1	F: ATGTGCCTGCCACTATTACAGA R: GGTATGGTAAGTTGGGTTGGTC	187
AhR	F: AGAAAGGGAAAGACGGAGCG R: GCGGCGTGGATAAACTGATA	232
ANF	F: ATGGGCTCCTTCTCCATCAC R: TTCATCGGTCTGCTCGCTCA	204
BNF	F: TGGGAAGTCCTAGCCAGTCT R: GATCCGGTCTATCTTCTGCC	236
$\beta$ -MHC	F: CCCTACGATTATGCGTTCTTCTCC R: CTGCTCCTCCCTCTGCTTCTGTT	198
GAPDH mRNA	AAAGTGGAGATTGTTGCCATCA CCTTGACTGTGCCGTTGAATTT	106

Table SIII. Primers for ChIP analysis.

Target name	Sequence	Products (bp)
CYP1B1 P1	F: CAGCGCCCAGGGAGATGACT R: GCTCTGTACGCCAGCAAACG	124
CYP1B1 I2	F: TCAGAAATTGTAATTCGGTCAC R: AAGAGGACGGGAGGGATGAG	147