

## **Nephroprotective effects of cardamonin on renal ischemia reperfusion injury/ UUO-induced renal fibrosis**

Banghua Zhang<sup>1,2,3, #</sup>, Zhi-Yuan Chen<sup>1,2, #</sup>, Zhengyu Jiang<sup>1,2</sup>, Shiyu Huang<sup>1,2,3</sup>, Xiu-Heng Liu<sup>1,2, \*</sup>, and Lei Wang<sup>1,2, \*</sup>

<sup>1</sup> Department of Urology, Renmin Hospital of Wuhan University, Wuhan 430060, China

<sup>2</sup> Wuhan University Institute of Urological Disease, Wuhan 430060, China

<sup>3</sup> Hubei Key Laboratory of Digestive System Disease, Wuhan 430060, China

# Banghua Zhang and Zhi-Yuan Chen contributed equally to this work

\*Correspondence should be addressed to Xiu-Heng Liu; [drliuxh@hotmail.com](mailto:drliuxh@hotmail.com), and Lei Wang; [drwanglei@whu.edu.cn](mailto:drwanglei@whu.edu.cn)

**Table S1: The primer sequences of human genes used in quantitative real-time PCR analysis**

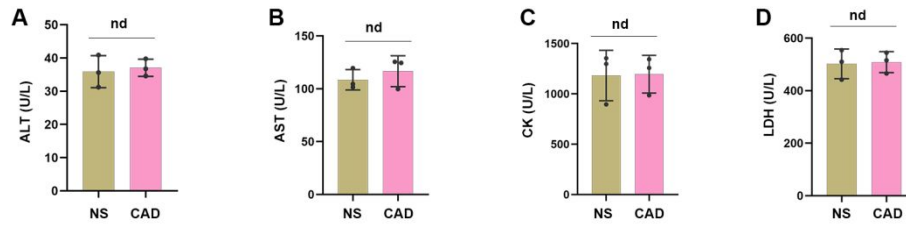
Primer	Forward Primer (5' -> 3')	Reverse Primer (5' -> 3')	Amplicon Size (bp)
Collagen I	GAGGGCCAAGACGAAGACATC	CAGATCACGTCATCGCACAAAC	140
Collagen III	GCCAAATATGTGTCTGTGACTCA	GGGCGAGTAGGAGCAGTTG	145
Fibronectin	CCGCCGAATGTAGGACAAGA	TGTCAGAGTGGCACTGGTAG	159
$\alpha$ -SMA	CAAGTCCTCCAGCGTTCTGA	GCTTCACAGGATCCCGTCTT	196
TNF- $\alpha$	CCTCTCTCTAATCAGCCCTCTG	GAGGACCTGGGAGTAGATGAG	220
IL-6	TTCTCCACAAGCGCCTTC	AGAGGTGAGTGGCTGTCTGT	138
IL-1 $\beta$	ATGATGGCTTATTACAGTGCCAA	GTCGGAGATTCGTAGCTGGA	132
GAPDH	GGAGCGAGATCCCTCCAAAAT	GGCTGTTGCATACTTCTCATGG	197
$\beta$ -actin	GCCGCCAGCTCACCAT	TCGTGCCACATAGGAATC	184

**Supplementary Table S1.** The primer sequences of human genes used in quantitative real-time PCR analysis.

**Table S2: The primer sequences of mouse genes used in quantitative real-time PCR analysis**

Primer	Forward Primer (5' -> 3')	Reverse Primer (5' -> 3')	Amplicon Size (bp)
NGAL	TGGCCCTGAGTGCATGTG	CTCTTGAGCTCATAGATGGTGC	239
KIM-1	GTAAACCAGAGATTCCCACACG	TCTCATGGGGACAAAATGTAGTG	196
Collagen I	GCTCCTTTAGGGGCCACT	CCACGTCTACCAATTGGGG	103
Collagen III	CTGTAAACATGGAACTGGGGAAA	CCATAGCTGAACTGAAAACCACC	144
Fibronectin	ATGTGGACCCCTCCTGATAGT	GCCCAGTGATTTTCAGCAAAGG	124
$\alpha$ -SMA	GTCCCAGACATCAGGGAGTAA	TCGGATACTTCAGCGTCAGGA	102
TNF- $\alpha$	CCTGTAGCCCACGTCTGTAG	GGGAGTAGACAAGGTACAACCC	148
IL-6	TAGTCCTTCCTACCCCAATTCC	TTGGTCCTTAGCCACTCCTTC	76
IL-1 $\beta$	GCAACTGTTCCCTGAACTCAACT	ATCTTTTGGGGTCCGCAACT	89
GAPDH	AGGTCGGTGTGAACGGATTG	TGTAGACCATGTAGTTGAGGTCA	123
$\beta$ -actin	GGCTGTATTCCCCTCCATCG	CCAGTTGGTAACAATGCCATGT	154

**Supplementary Table S2.** The primer sequences of mouse genes used in quantitative real-time PCR analysis.



**Supplementary Figure 1. 100mg/kg/d of cardamomin by continuous gavage for 7 d had no obvious toxicity on liver and heart function in mice.** (A-B) The influence about CAD on the levels of ALT and AST in normally fed eight-week-old C57BL/6 mice. (C-D) The influence about CAD on the levels of CK and LDH in normally fed eight-week-old C57BL/6 mice. Values measured during animal experiments were carried out as mean  $\pm$  SD, n=3. nd, no statistical difference; NS, sterile saline; CAD, cardamomin; ALT, alanine transaminase; AST, aspartate transaminase; CK, creatine kinase; LDH, lactic dehydrogenase.