

## Supplementary Material

### Supplementary Tables

**Suppl. Table 1** Primers used for qRT-PCR in this study

Gene names	Primers	Species
PLD1	F: ACAGCATTAGCAGCGTCG	Rattus norvegicus
	R: CCAGTTGAACCCAGTCCTT	
PLD1	F: CTTATCCTTTTCTGCTTCCA	Homo sapiens
	R: AGTGCCTGCTGTTCTCTATC	
$\beta$ -actin	F: CCCATCTATGAGGGTTACGC	Rattus norvegicus
	R: TTTAATGTCACGCACGATTTC	
$\beta$ -actin	F: GGGAAATCGTGCGTGACATTAAGG	Homo sapiens
	R: CAGGAAGGAAGGCTGGAAGAGTG	
miR-122-5p	F:AGTGGAGTGTGACAATGGT	Rattus norvegicus
	R:CCAGTTTTTTTTTTTTTTTTTCAAACACC	
miR-122-5p	F: AGTGGAGTGTGACAATGGT	Homo sapiens
	R:CCAGTTTTTTTTTTTTTTTTTCAAACACC	
U6	F: CTCGCTTCGGCAGCACA	Rattus norvegicus
	R: AACGCTTCACGAATTTGCGT	
U6	F: CTCGCTTCGGCAGCACA	Homo sapiens
	R: AACGCTTCACGAATTTGCGT	

F: forward primer, R: reverse primer

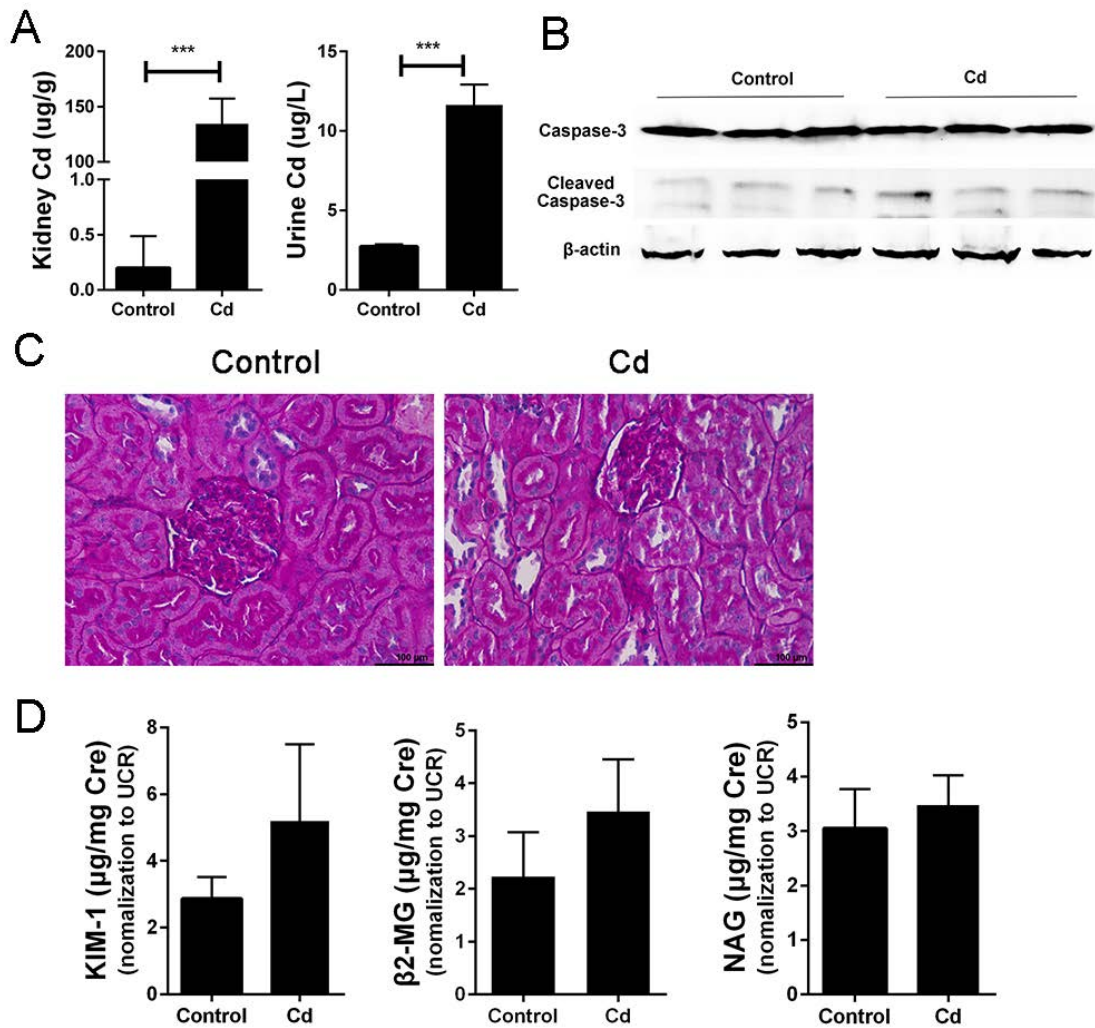
**Suppl. Table 2** Serum and urine creatinine level, and creatinine clearance of SD rats

chronically exposed to a low level of Cd

Groups	SCr (mg/dL)	UCr (mg/dL)	CrCl (dL/min)	<i>p</i> <sup>*</sup>
Control	0.37±0.1	212.49±42.81	11.17±3.57	0.253
Cd treatment	0.32±0.05	232.58±47.21	13.82±3.90	

SCr, serum creatinine; UCr, urine creatinine; CrCl, creatinine clearance. N = 3, \**t*-test for CrCl difference.

## Supplementary Figures

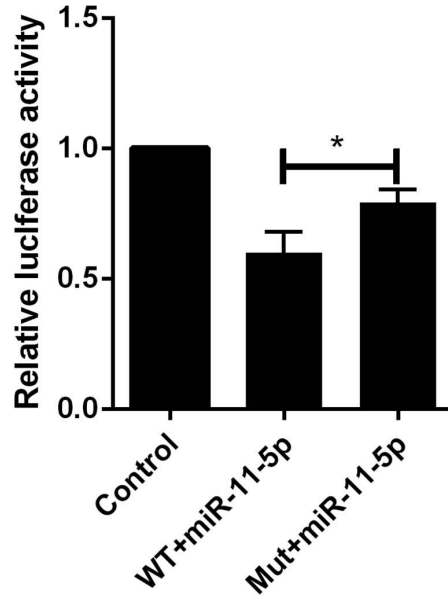


**Suppl. Fig. 1 Measurements of kidney impairment in rats exposed to chronic Cd for 6 weeks.** (A) The concentration of Cd, detected using ICP-MS, in kidney tissue and urine of rats. (B) Pathohistological stain in kidney tissue produced by Cd exposure (Periodic Acid-Schiff stain, HE $\times$ 400). (C) Cleaved-Caspase-3 expression after Cd exposure. (D) Early biomarkers of kidney injury in urine detected with ELISA. Rats exposed to CdCl<sub>2</sub> at 0.6 mg/kg/d for 5 days per week for 6 weeks. Data are represented as mean  $\pm$  SD, N = 3, \* $p$  < 0.05, \*\*\* $p$  < 0.001.

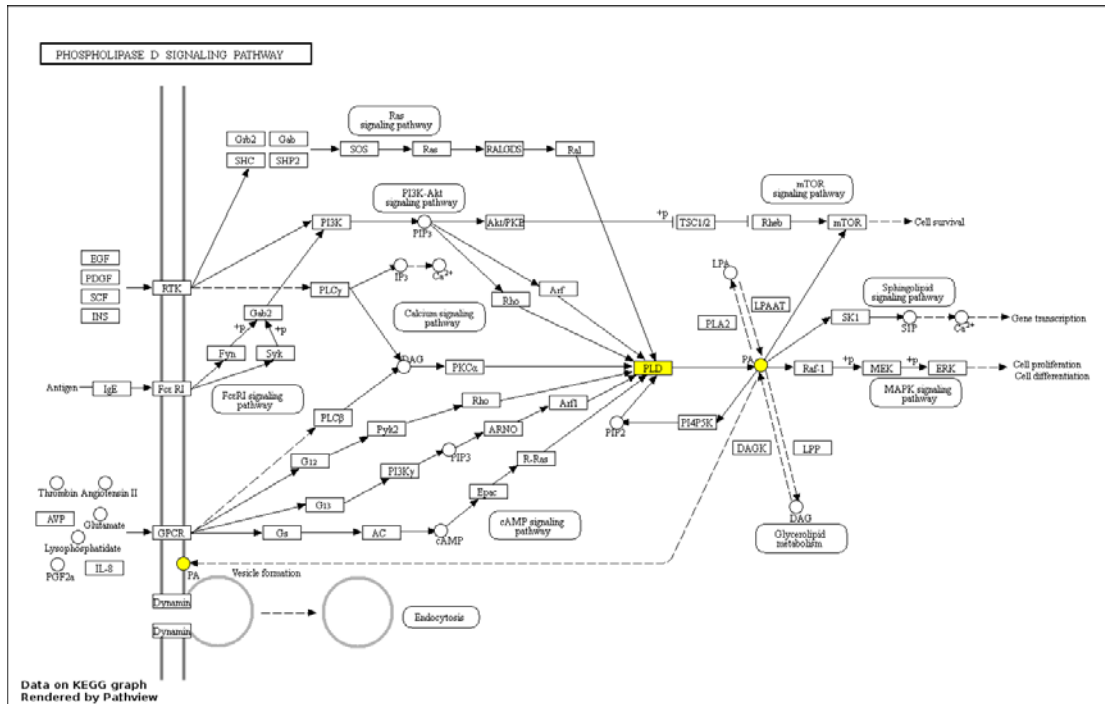
**A**



**B**



**Suppl. Fig. 2. miR-122-5p binding site in *PLD1*.** (A) Schematic diagram of the miR-122-5p putative binding site in *PLD1*. (B) Validation of miR-122-5p binding site in *PLD1* using dual-luciferase reporter assay.



**Suppl. Fig. 3 Phospholipase D signaling pathway constructed by Pathview based on KEGG.**