

Table S1. Patients characteristics

	All	Control	HTN	DM	HTN-CKD	DKD	p-value
N (%)	95	19 (20%)	20 (21.1%)	17 (17.9%)	19 (20.0%)	20 (21.1%)	-
Age (years)	63.6 ± 13.5	62.0 ± 9.7	64.1 ± 10.8	64.5 ± 12.7	59.3 ± 20.5	67.9 ± 10.8	0.363
Gender (Male, N, %)	55 (57.9%)	11 (57.9%)	12 (60.0%)	10 (58.8%)	12 (63.2%)	10 (50.0%)	0.942
Race (N, %)							
African American	36 (37.9%)	6 (35.3%)	7 (43.8%)	5 (41.7%)	11 (51.1%)	7 (36.8%)	
Caucasian	19 (20.0%)	5 (29.4%)	5 (31.2%)	2 (16.7%)	2 (11.1%)	5 (26.3%)	0.825
Hispanic	6 (6.3%)	1 (5.9%)	1 (6.2%)	2 (16.7%)	1 (5.6%)	1 (5.3%)	
Asian	5 (5.3%)	1 (5.9%)	1 (6.2%)	2 (16.7%)	0 (0.0%)	1 (5.3%)	
BMI (kg/m ²)	29.8 ± 9.3	28.6 ± 6.3	35.0 ± 15.2	28.7 ± 4.7	25.0 ± 5.8	31.6 ± 7.9	0.014
Systolic BP (mmHg)	138.7 ± 24.8	128.7 ± 19.3	142.8 ± 35.7	134.0 ± 16.8	152.4 ± 24.3	134.5 ± 27.5	0.061
Diastolic BP (mmHg)	78.1 ± 13.7	74.5 ± 12.8	79.2 ± 7.2	74.0 ± 11.4	87.4 ± 13.8	71.2 ± 12.7	0.010
Serum albumin (g/dL)	4.0 ± 0.7	4.3 ± 0.4	4.1 ± 0.5	3.9 ± 0.6	4.1 ± 0.5	3.7 ± 0.9	0.051
eGFR (mL/min/1.73 m ²)	60.3 ± 29.8	85.5 ± 18.6	77.1 ± 15.4	78.4 ± 10.7	29.6 ± 21.7	33.3 ± 18.4	<0.001

Table S2. Correlations of *PPARGC1A* with genes related to Notch signaling pathway
(Microarray analysis using human kidney samples)

	Pearson's coefficient (γ)	p-value
<i>NOTCH1</i>	-0.096	0.353
<i>NOTCH2</i>	-0.301	0.003
<i>NOTCH3</i>	-0.382	< 0.001
<i>NOTCH4</i>	-0.102	0.323
<i>HES1</i>	-0.399	< 0.001
<i>HES2</i>	0.029	0.778

Supplemental Figures

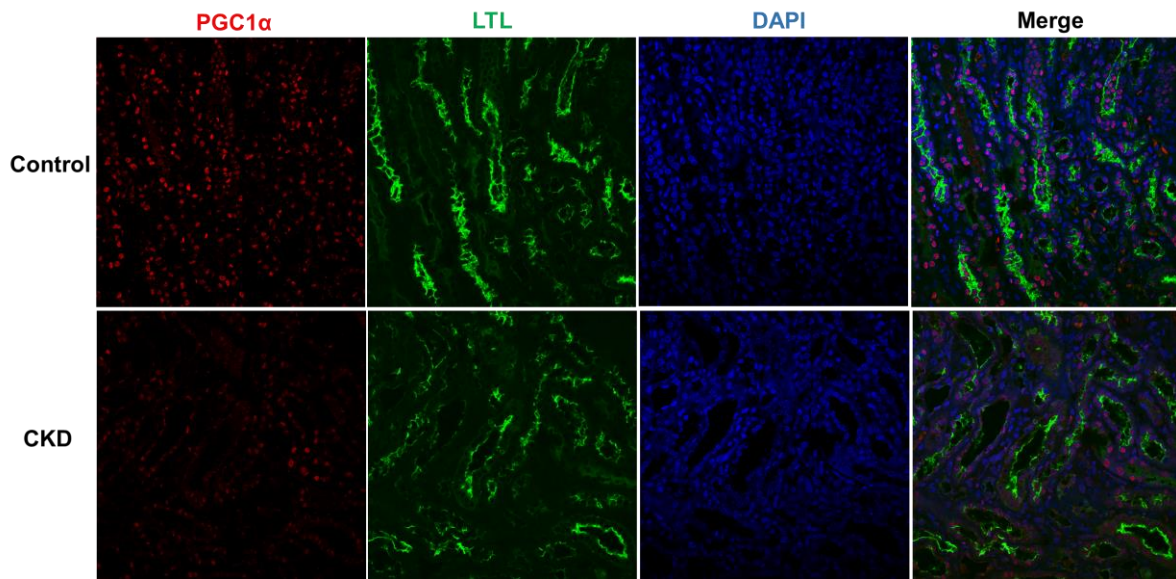


Figure S1. Double immunofluorescence study using lotus tetragonolobus lectin (LTL), a proximal tubule marker, in normal healthy kidney and CKD.

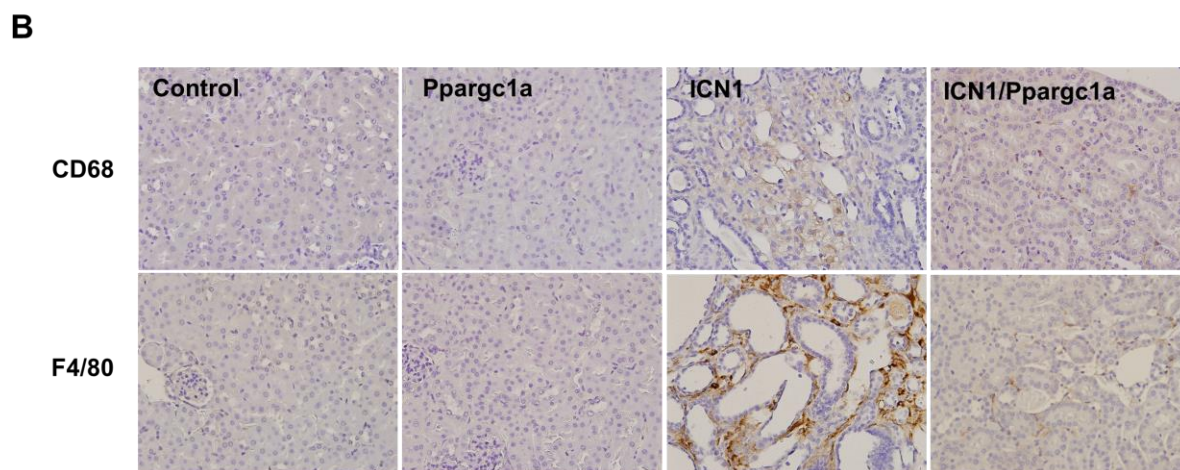
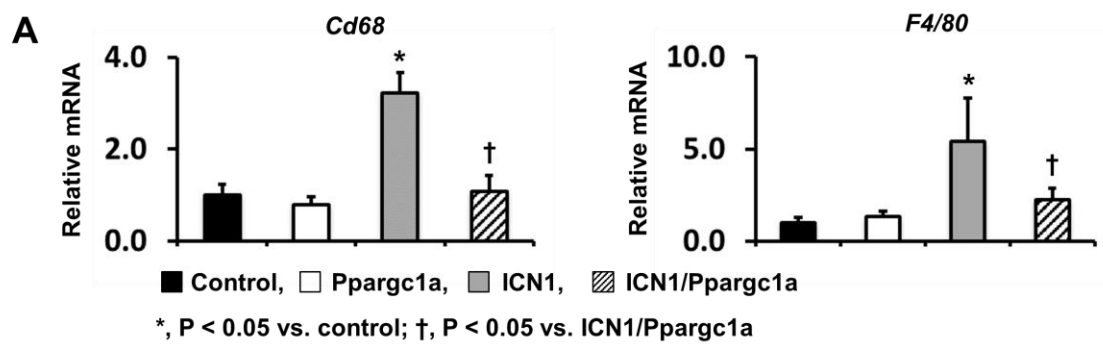


Figure S2. (A) Relative mRNA level of *Cd68* and *F4/80* in whole kidneys lysates of control, *Pax8-rtTA/tetO-Ppargc1a*, *Pax8-rtTA/tetO-ICN1*, and *Pax8-rtTA/tetO-ICN1/tetO-Ppargc1a* mice. (B) Representative images of immunohistochemical staining for CD68 and F4/80 in the same mice.

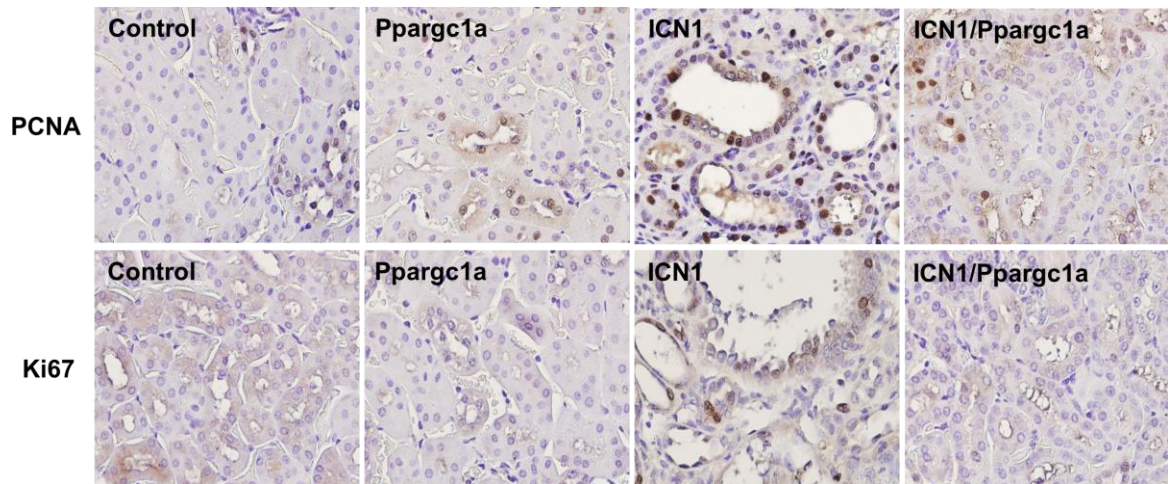


Figure S3. Representative images of immunohistochemical staining for PCNA and Ki67 in *control*, *Pax8-rtTA/tetO-Ppargc1a*, *Pax8-rtTA/tetO-ICN1*, and *Pax8-rtTA/tetO-ICN1/tetO-Ppargc1a* mice.