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Supplemental Information

lncRNA NR_038323 Suppresses Renal Fibrosis in Diabetic Nephropathy by Targeting the miR-324-3p/DUSP1 Axis

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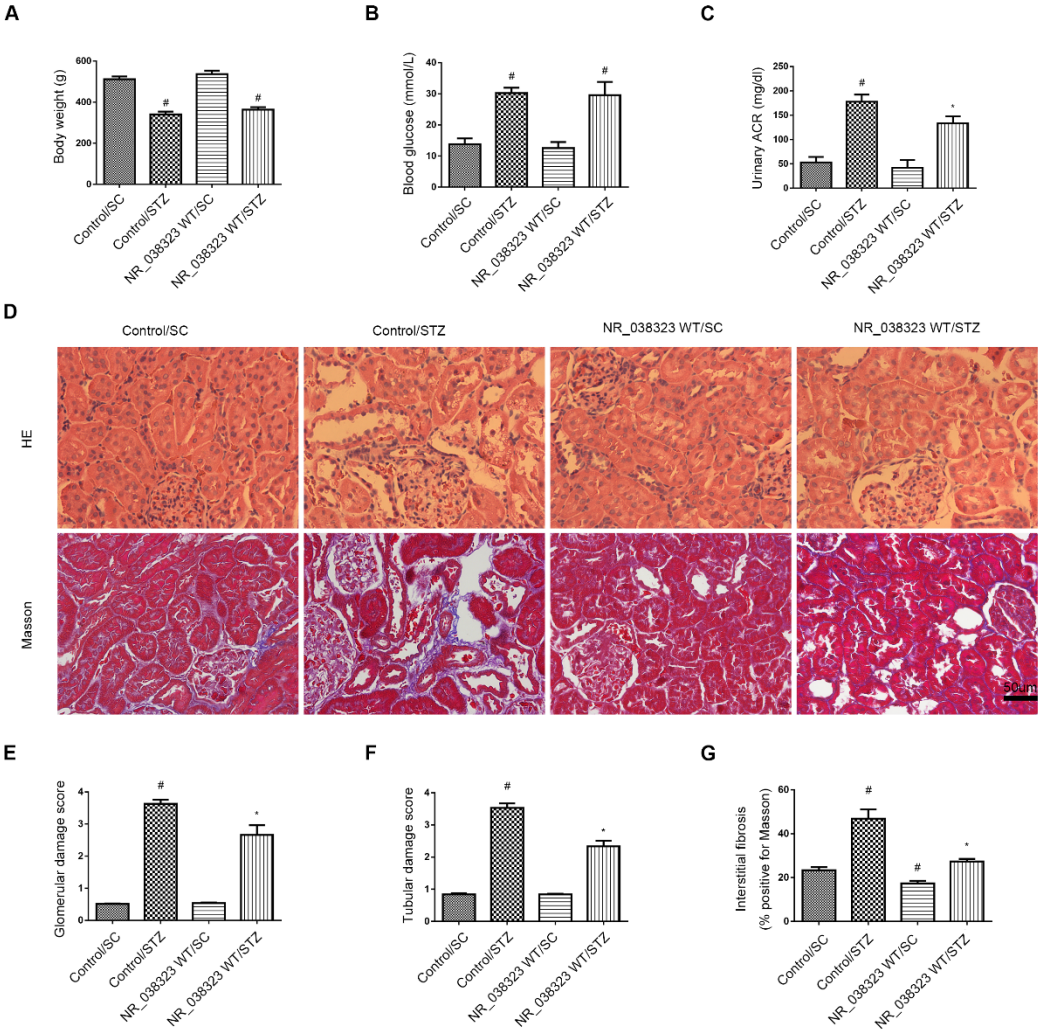
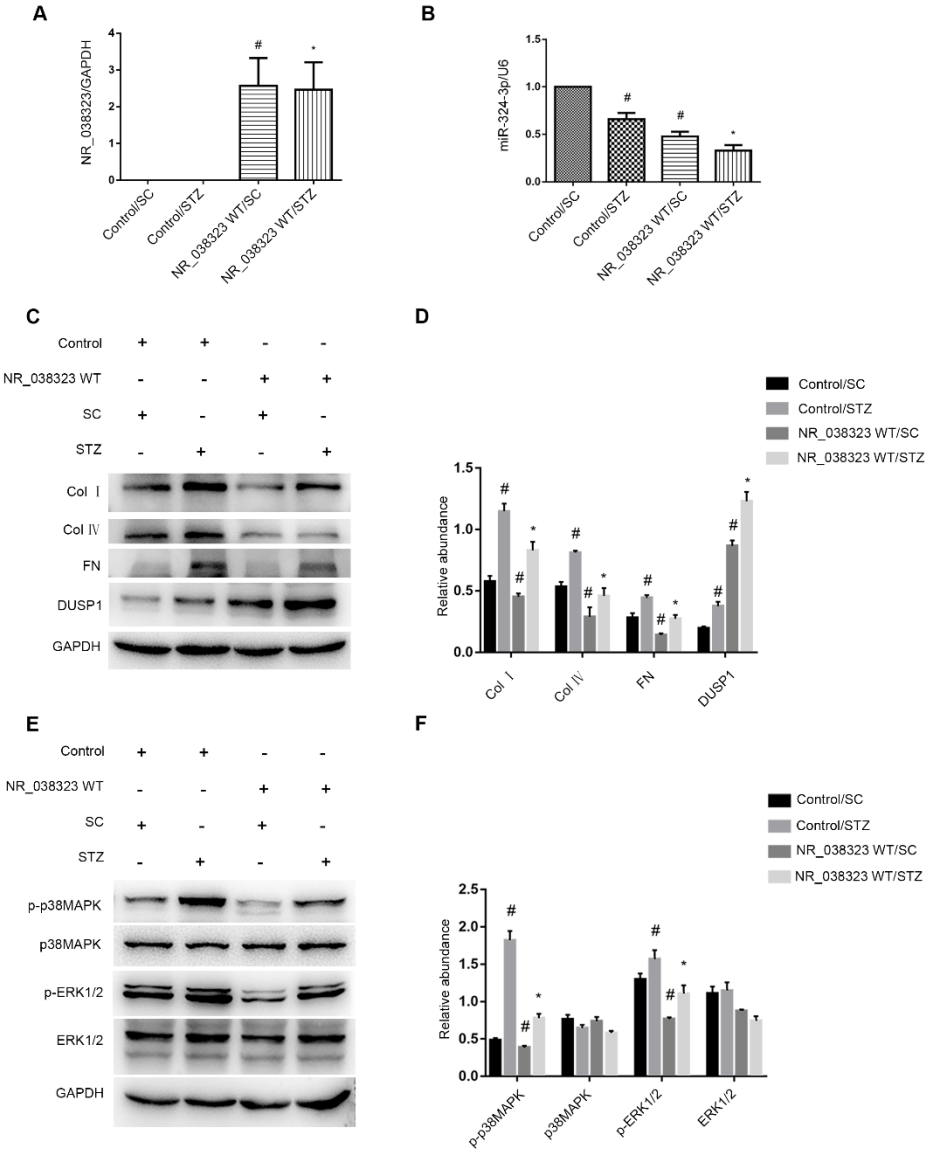
Supplementary Table Patient characteristics

Variable	**MCD (10)**	**DN (9)**
Age(years)	45.8±4.8	48.5±2.1
Gender (Male: Female)	5:5	5:4
Serum Glucose(mmol/L)	5.1±0.4	10.6±2.1[#]
eGFR	118.6±1.0	70.4±15.1[#]
Urine Protein	—	+: 3 ++: 3 +++: 3

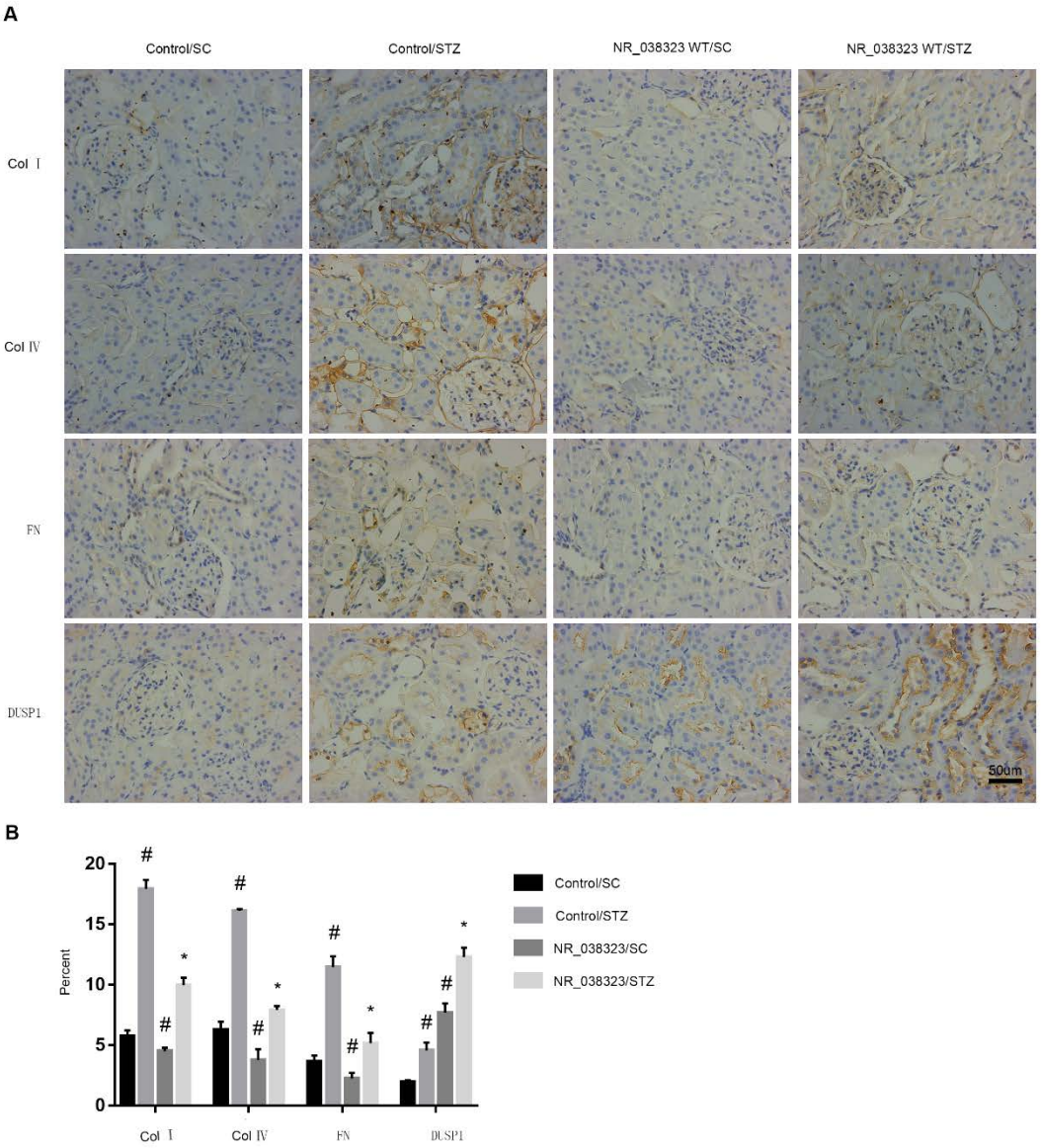
Note: — indicate the lack of proteinuria.



Supplementary Figure1. Attenuation of renal Fibrosis in STZ-induced DN rats following overexpression of LncRNA NR_038323. (A) The body weights of the rats. (B) Fasting glucose.(C) Urinary ACR measurements. (D) The staining of H&E and Masson. Quantification of glomerular damage score (E), tubular damage score (F), and tubulointerstitial fibrosis analysis (G) in the kidney cortex. Original magnification, ×200. Bar, 50μm. Data are expressed as mean ± SD (n=6). #p < 0.05, STZ or LncRNA NR_038323 group vs. Control group; *p < 0.05, STZ-treated with lncRNA NR_038323 group vs. STZ group.



Supplementary Figure2. Reduction of collagen I, collagen IV, fibronectin, α-SMA via targeting miR-324-3p/DUSP1/p38MAPK and ERK1/2 axis in STZ-induced DN rats following overexpression of LncRNA NR_038323. (A) RT-qPCR analysis of lncRNA NR_038323**. (B)** RT-qPCR analysis of miR-324-3p. (C) Western blot analysis of collagen I, collagen IV, fibronectin, α-SMA, DUSP1, and GAPDH. (D) Densitometric quantification of western blot bands. (E) Western blot analysis of p-p38MAPK, p38MAPK, p-ERK1/2, ERK1/2, and GAPDH. (F) Densitometric quantification of western blot bands. Data are expressed as means ± SD (n =6). Data are expressed as mean ± SD (n=6). #$p < 0.05$, STZ or LncRNA NR_038323 group vs. Control group; *$p < 0.05$, STZ-treated with lncRNA NR_038323 group vs. STZ group.



Supplementary Figure3. Inhibition of collagen I, collagen IV, fibronectin, and α-SMA expressions detected by immunochemistry in STZ-induced DN rats following overexpression of lncRNA NR_038323 (A) Immunohistochemical staining of collagen I, collagen IV, fibronectin, and α-SMA . (B) Quantification of immunohistochemical staining of collagen I, collagen IV, fibronectin, and α-SMA. Original magnification, ×200. Bar, 50 μm. Data are expressed as mean ± SD (n=6). *#p < 0.05*, STZ or LncRNA NR_038323 group vs. Control group; **p < 0.05*, STZ-treated with lncRNA NR_038323 group vs. STZ group.