

SUPPLEMENTAL MATERIAL

MiR-192-5p in the Kidney Protects Against the Development of Hypertension

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Running title: Renal miR-192 in Hypertension

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Table S1. Clinical characteristics of the patients involved in the kidney biopsy analysis. Scr, serum creatinine; BUN, blood nitrogen urea; eGFR, estimated GFR; SBP, systolic blood pressure; DBP, diastolic blood pressure; ARB, angiotensin II receptor blocker; CCB, calcium channel blocker; ACEI, angiotensin converting enzyme inhibitor. Data shown are mean \pm SEM. *, $p < 0.05$ vs. control subjects. Reproduced with permission from ref. 22.

Group	Control subjects	Hypertension	Hypertensive Nephrosclerosis
n	10	8	32
Age (year)	44.9 \pm 6.1	48.5 \pm 6.6	53.9 \pm 2.0
Gender	4 M, 6 F	4 M, 4 F	18 M, 14 F
Race	Asian	Asian	Asian
Pathological findings	Minimal or mild arteriolonephrosclerosis	Minimal or mild Arteriolonephrosclerosis	Moderate to severe arterial or arteriolar nephrosclerosis consistent with hypertensive nephropathy; no other kidney pathology
Scr (mg/dL)	1.0 \pm 0.1	1.1 \pm 0.1	1.4 \pm 0.1
BUN (mg/dL)	17.2 \pm 1.2	19.8 \pm 3.3	20.5 \pm 1.2
eGFR (ml/min)	87.9 \pm 10.1	81.3 \pm 11.3	70.6 \pm 6.4
SBP last visit (mmHg)	120 \pm 3	137 \pm 7*	147 \pm 4*
DBP last visit (mmHg)	77 \pm 3	86 \pm 3*	92 \pm 3*
SBP last 3 visits (mmHg)	114 \pm 2	142 \pm 4*	144 \pm 3*
DBP last 3 visits (mmHg)	73 \pm 1	87 \pm 2*	90 \pm 3*
Anti-hypertensive medications (number of patients; some taking two or more)	None	ARB (6), CCB (3)	CCB (20), ARB (14), α/β blocker (4), ACEI (3), β blocker (2), diuretics (2), α blocker (1)
Diabetes mellitus	0	2*	7*

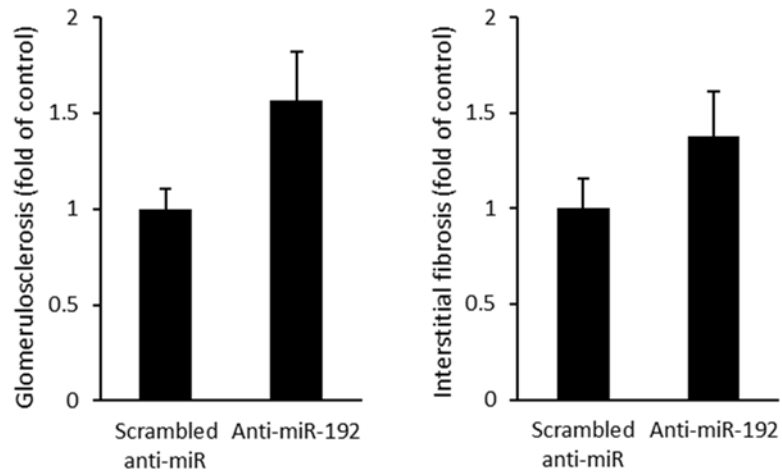


Figure S1. Glomerulosclerosis and renal interstitial fibrosis in L26 rats treated with anti-miR-192-5p or control anti-miR. Kidney sections from the rats whose blood pressure was shown in Figure 2C were examined. N=6 and 8.

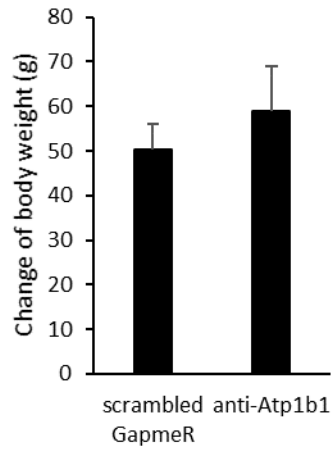


Figure S2. Body weight in L26 rats treated with anti-miR-192-5p and scrambled or anti-Atp1b1 GapmeR. Body weight was measured on the day that the renal artery injection was performed and the last day of the experiment in the double knockdown study depicted in Figure 4D. Changes in body weight between the two time points, which likely reflected growth over the 17-day period primarily, are plotted here. N=4.

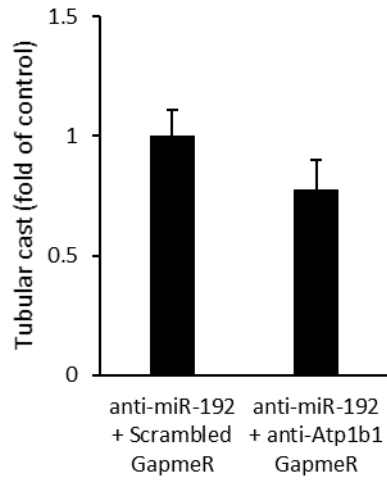


Figure S3. Tubular cast in L26 rats treated with anti-miR-192-5p and scrambled or anti-Atp1b1 GapmeR. Kidney sections from rats whose blood pressure was shown in Figure 4D were examined. N=4.