

Supplemental material

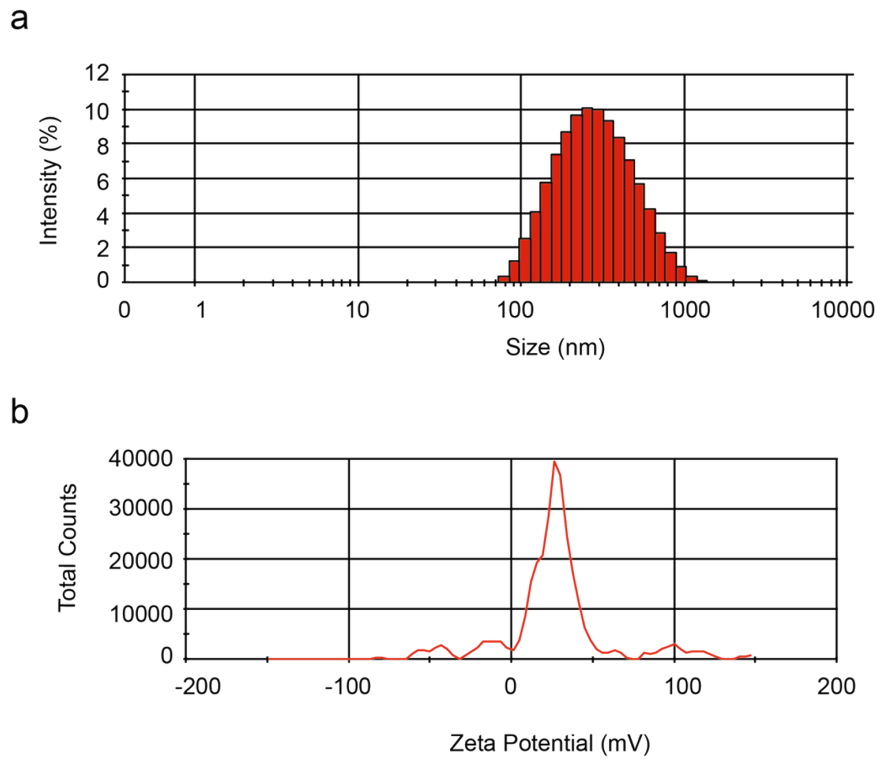


Figure S1. Size and zeta potential of chitosan/siRNA nanoparticles. The size of chitosan/siRNA nanoparticles was measured by DLS (a) and the zeta potential is measured by LVD (b) at 25°C. The size of chitosan/siRNA nanoparticles was 226nm and the zeta potential was 28 mV.

Table S1: Effect of COX-2 siRNA (0.5 mg/kg) on weight, kidney weight and blood chemistry.

	SHAM	3dUUO siEGFP	3dUUO siCOX-2
Body weight (g)	22.9±0.4	21.1±0.4*	20.8±0.3*
Obstructed Kidney weight (mg/g BW)	5.60±0.06	9.09±0.27*	8.99±0.32*
Plasma Creatinine (µmol/L)	6.8±0.7	10.8±0.7*	9.5±0.7*
Plasma Urea (mmol/L)	10.6±0.4	11.1±0.5	11.1±0.6
Plasma Osmolality (mOsmol/kg H ₂ O)	341.4±13.8	336.0±1.7	330.0±4.4
Plasma Potassium (mmol/L)	3.8±0.2	4.6±0.2*	4.5±0.1*
Plasma Sodium (mmol/L)	151.2±0.7	151.3±0.8	151.6±0.8

Table S1. Biochemical values. Mice were subjected to UUO for 3 days and treated with siCOX-2 or siEGFP for control. At time of sacrifice, a blood sample was taken from the left ventricle. Body weight and obstructed kidney weight were measured. Plasma creatinine, urea, osmolality, potassium and sodium concentrations were measured using Roche Cobas 6000 Analyser (Roche Diagnostic, Hvidovre, Denmark). Values are means±SEM. *P<0.05 vs. sham and 3dUUO siEGFP (n=6).

Table S2. Primers used for QPCR amplification.

Gene/protein	Forward primer (5'-3')	Reverse primer (5'-3')
COX-2	TGGGTGTGAAGGGAAATAAGG	CATCATATTTGAGCCTTGGGG
CD68	CTTCCCACAGGCAGCACAG	AATGATGAGAGGCAGCAAGAGG
TNF- α	AGGCTGCCCCGACTACGT	GACTTTCTCCTGGTATGAGATAGCAAA
IL-6	GATGCTACCAAACCTGGATATAATC	GGTCCTTAGCCACTCCTTCTGTG
β -actin	CTAAGGCCAACCGTGAAAAG	GGTACGACCAGAGGCATACA
GAPDH	GACGGCCGCATCTTCTTGTG	GCGCCCAATACGGCCAAATC
Itgax	ACTGACCTGGTCCTGATTGG	CAGCACCTCTGTTCTCCTCC
Arg1	CAGAAGAATGGAAGAGTCAG	CAGATATGCAGGGAGTCACC
Mac-2	GCTTATCCTGGCTCAACTGC	TTCACTGTGCCCATGATTGT
MCP-1	CCCAATGAGTAGGCTGGAGA	TCTGGACCCATTCTTCTTG
KIM-1	CGGTACAACCTAAAGGGGCA	GACGTGTGGGAATCTCTGGT