**Supplementary Materials:** L-Cysteine and L-Serine Modified Dendrimer with Multiple Reduced Thiols as a Kidney-Targeting Reactive Oxygen Species Scavenger to Prevent Renal Ischemia/Reperfusion Injury

Figure S1. MALDI-TOF spectra of l-cysteine (Cys) and l-serine (Ser)-modified, third-generation polyamidoamine dendrimer [Ser-PAMAM-Cys] (Cysteine content 20% (A) and 40% (B)) with a trans-indole-3-acrylic acid matrix.
Figure S2. The purity and stability of Ser-PAMAM-Cys were evaluated by 15% polyacrylamide gel electrophoresis on sodium dodecyl sulfate (SDS-PAGE) under nonreducing conditions. Lane 1, Ser-PAMAM-Cys (Cys content: 20%); Lane 2, Ser-PAMAM-Cys (Cys content: 40%).

Figure S3. (A) Time courses of plasma concentration and tissue accumulation of $^{111}$In-labeled Ser-PAMAM-Cys with a high degree of Cys modification (Ser content: 60%; Cys content: 40%) after intravenous administration at 1 mg kg$^{-1}$. Results are expressed as means ± SE for three mice. ○, plasma; ▲, liver; ■, kidney; ◊, spleen; Δ, heart; □, lung. (B) Ex vivo imaging of NIR-labeled Ser-PAMAM-Cys with a high degree of Cys modification (Ser content: 60%; Cys content: 40%) 60 min after intravenous injection. The fluorescence intensities were determined for the liver, kidney, spleen, heart, and lung.