

Supplementary Information

Redox Nanomedicine Ameliorates Chronic Kidney Disease (CKD) by Mitochondrial Reconditioning

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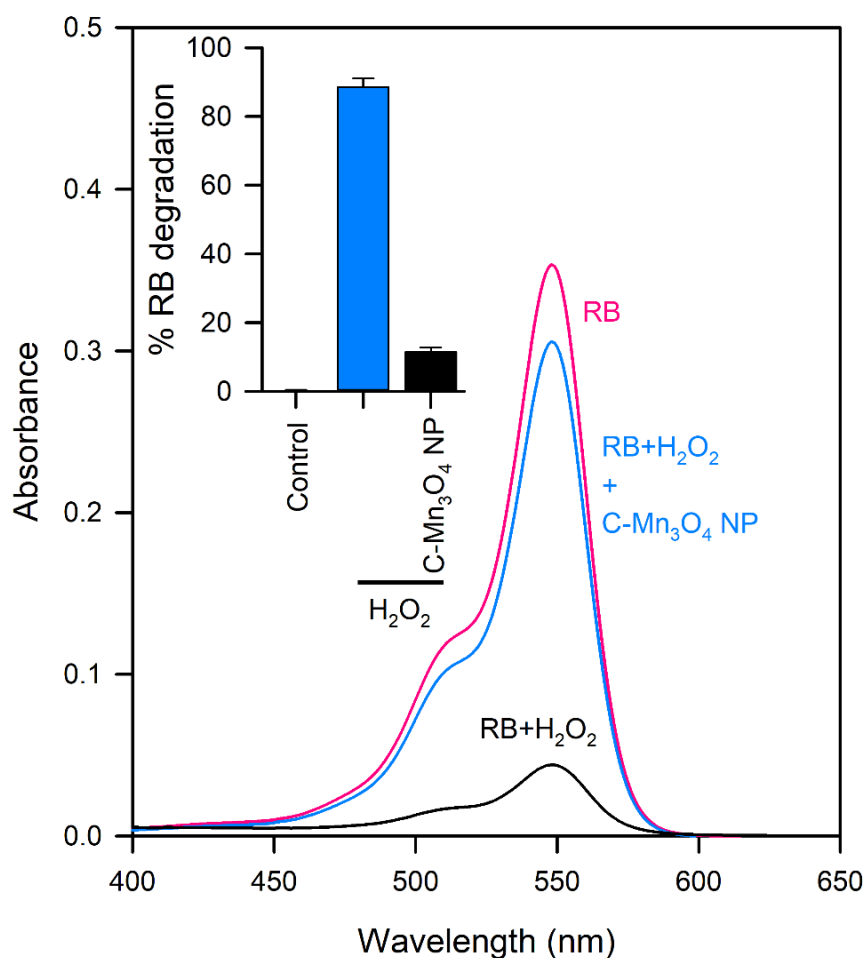
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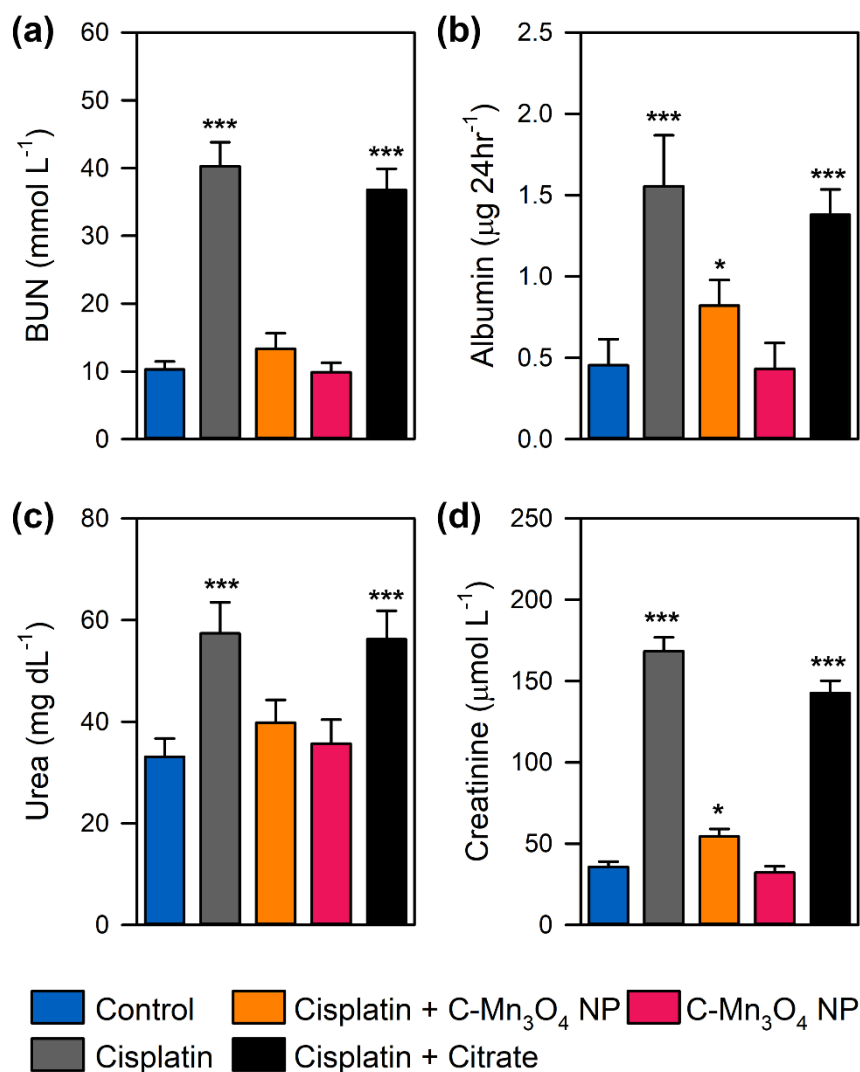
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Supplementary Figure S1. H₂O₂ scavenging activity of C-Mn₃O₄ NPs using Rose Bengal (RB) assay. The RB undergoes oxidative degradation upon interaction with H₂O₂ as indicated in significantly decreased absorbance spectra. In presence of C-Mn₃O₄ NPs, H₂O₂ cannot degrade RB due to radical scavenging activity of the NPs. The inset shows the percentage of RB degradation by H₂O₂ in absence and presence of C-Mn₃O₄ NPs. Data are expressed as Mean $\pm$ SD.



Supplementary Figure S2. Efficacy of C-Mn₃O₄ NPs in reversal of CKD in animal model. (a) Blood urea nitrogen (BUN) content. (b) Urinary albumin excretion as an indicator of albuminuria, hallmark of CKD. (c) Serum urea concentration. (d) Serum creatinine level. Note, treatment with citrate (the ligand) could not reduce the cisplatin induced nephrotoxicity. So, we left the treatment group from further downstream studies.

Data are expressed as Mean $\pm$ SD. $N=6$. *, **, *** Values differ significantly from control group (without treatment) (*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$).