Supporting Information

Sulfated *Undaria pinnatifida* polysaccharides inhibit kidney stone formation through crystalline modulation and relieving cellular oxidative damage and inflammation

Xue-Wu Chen[1#], Jun Long[1#], Quan Zhang[1], Ling-Hong Huang[1]*, Xin-Yuan Sun[1]*

[1]Department of Urology, Guangzhou Institute of Urology, Guangdong Key Laboratory of Urology, the First Affiliated Hospital of Guangzhou Medical University, Guangzhou Medical University, Guangzhou, Guangdong 510230, China.

# These authors contributed equally to this work.

***Correspondence:** Xin-Yuan Sun (E-mail address: sunxinyuan1985@163.com); Ling-Hong Huang (E-mail address: tohlhong@163.com). Department of Urology, Guangzhou Institute of Urology, Guangdong Key Laboratory of Urology, the First Affiliated Hospital of Guangzhou Medical University, Guangzhou Medical University, Guangzhou, Guangdong 510230, China.

Supplementary Figures

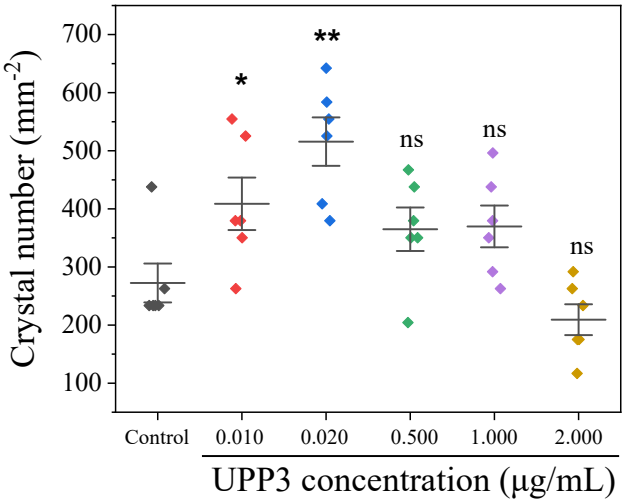

Figure S1. Quantitative statistical diagram of calcium oxalate crystal number, Compared with control group, **P<0.05, **P<0.01.

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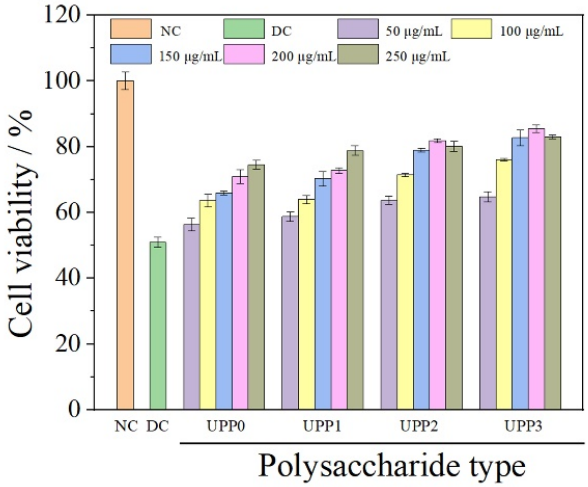

Figure S2. Detection of cell viability before and after UPPS protection of NRK-52E cells. NC: Normal control group, DC: Damaged control group; polysaccharide concentration: 50 and 200 μg/mL; sodium oxalate concentration: 2 mM; protection time: 24h.

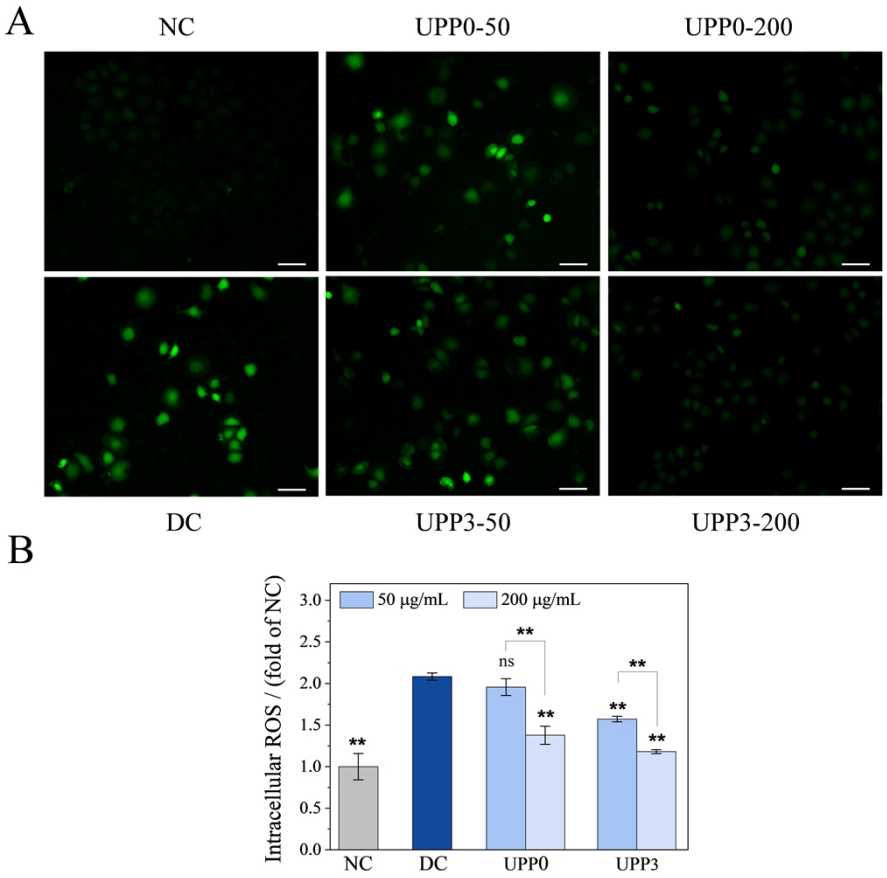

Figure S3. The ROS level of NRK-52E cells was detected by DCFH-DA staining, scale bar: 50 μm. NC: Normal control group, DC: Damaged control group; polysaccharide concentration: 50 and 200 μg/mL; sodium oxalate concentration: 2 mM; protection time: 24h; Compared with DC group, **P<0.01.

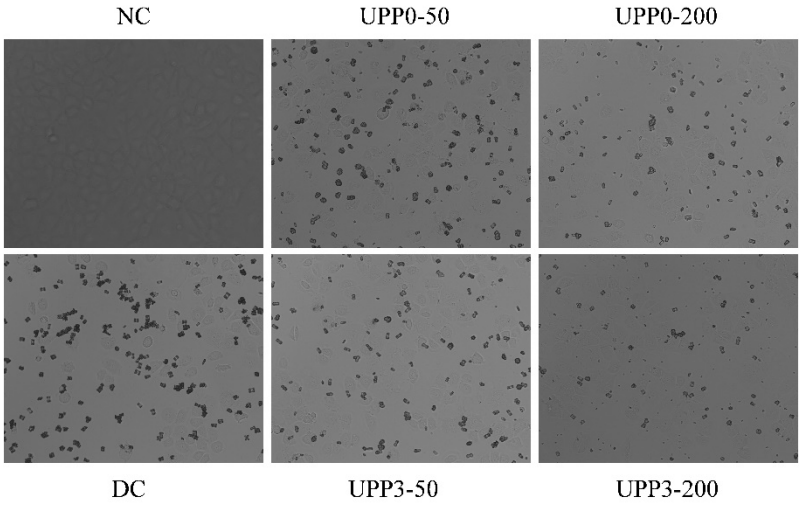

Figure S4. The morphology of NRK-52E cells before and after UPPS protection was observed, scale bar: 50 μm. NC: Normal control group, DC: Damaged control group; polysaccharide concentration: 50 and 200 μg/mL; sodium oxalate concentration: 2 mM; protection time: 24h.

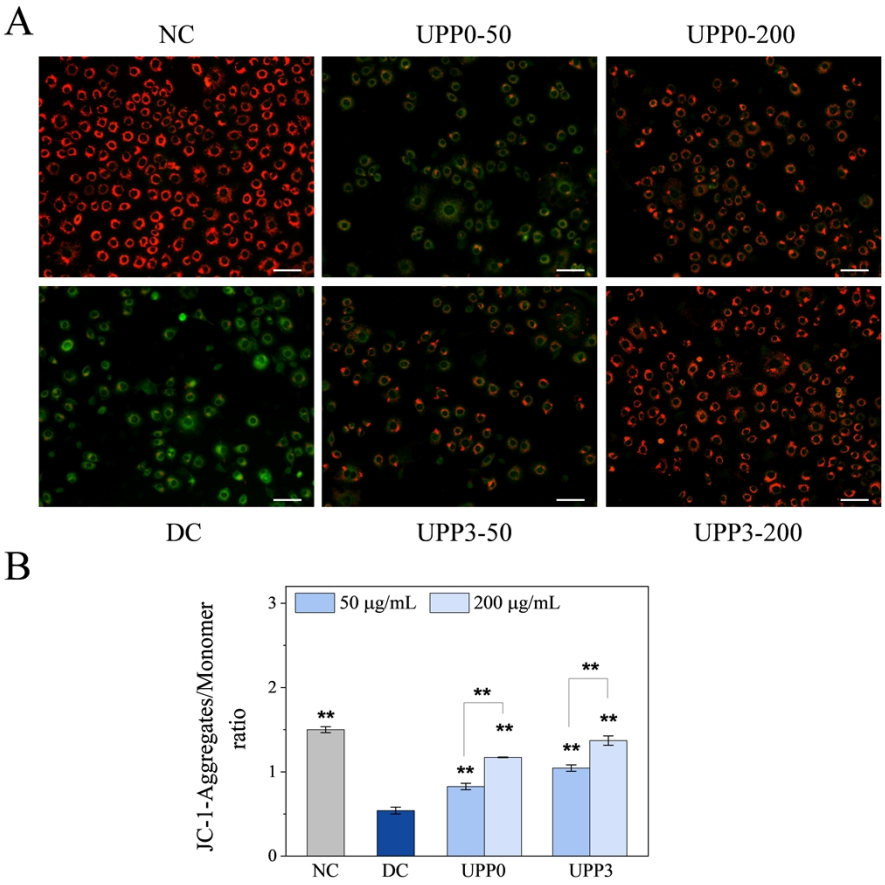

Figure S5. The mitochondrial membrane potential of NRK-52E cells before and after UPPS protection was detected by JC-1 staining, scale bar: 50 μm. NC: Normal control group, DC: Damaged control group; polysaccharide concentration: 50 and 200 μg/mL; sodium oxalate concentration: 2 mM; protection time: 24h; Compared with DC group, **P<0.01.

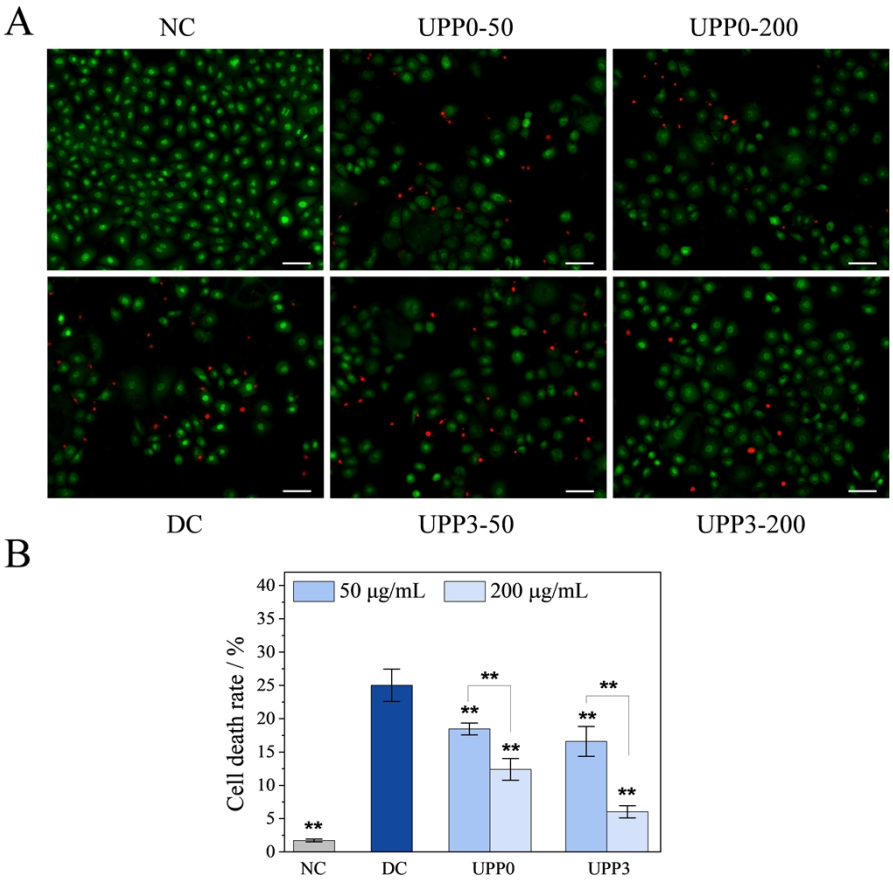

Figure S6. AO/EB double staining was used to detect the death of NRK-52E cells before and after UPPS protection, scale bar: 50 μm. NC: Normal control group, DC: Damaged control group; polysaccharide concentration: 50 and 200 μg/mL; sodium oxalate concentration: 2 mM; protection time: 24h; Compared with DC group, **P<0.01.