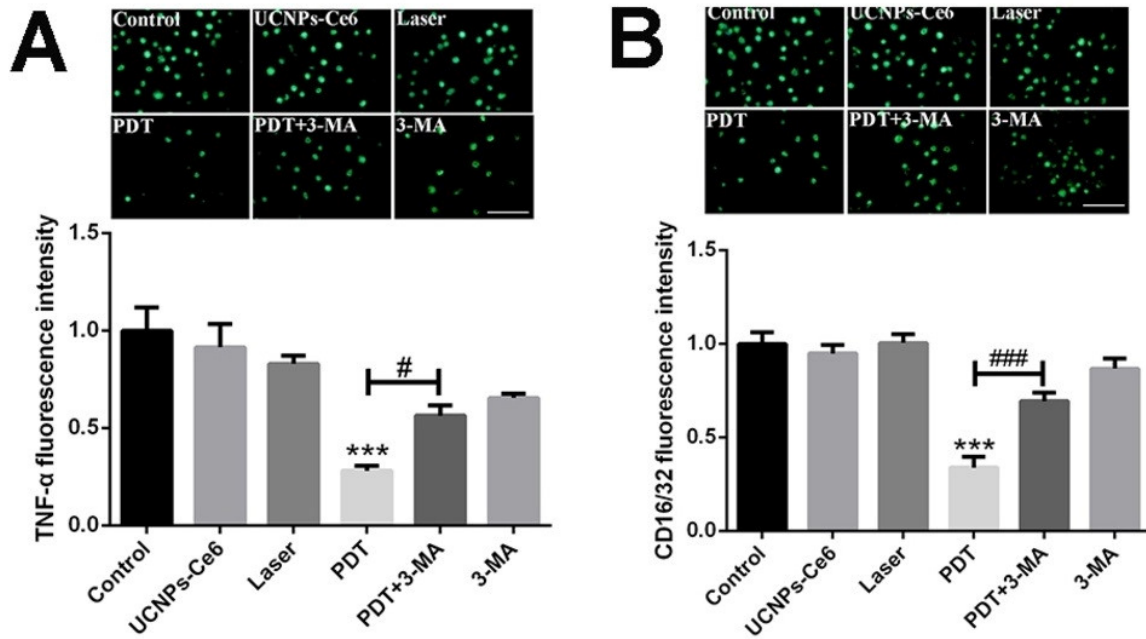


# Supplemental Material

## **ROS Generated by Upconversion Nanoparticle-Mediated Photodynamic Therapy Induces Autophagy via PI3K/AKT/ mTOR Signaling Pathway in M1 Peritoneal Macrophage**

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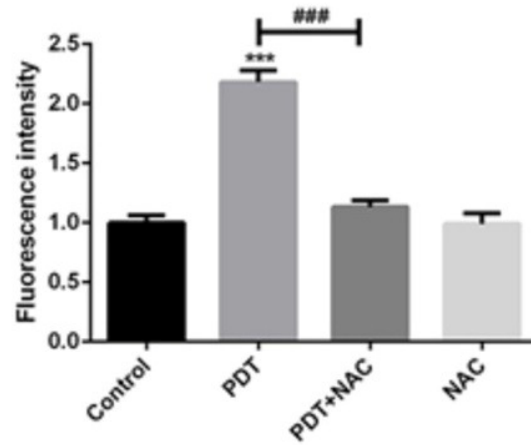
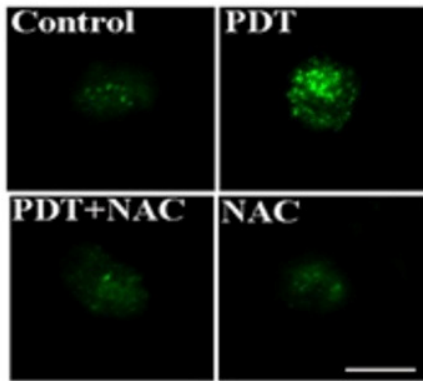
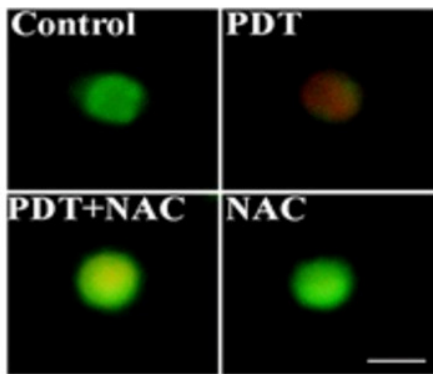
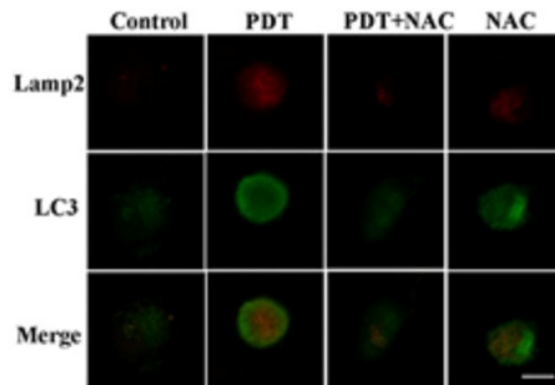


**Fig. S1. PDT inhibited the expression of pro-inflammatory factors, which was suppressed by 3-MA.**

(A) The expression of TNF- $\alpha$  at 12 h after different treatments in the fluorescence assays (scale bar : 50  $\mu$ m) (n = 10).

(B) The expression of CD16/32 at 12 h after different treatments in the fluorescence assays (scale bar : 50  $\mu$ m) (n =

10). \*\*\* P < 0.001 vs control group, # P < 0.05, ### P < 0.001 vs PDT group.

**A****B****C**

**Fig. S2. PDT induced the autophagy, which was inhibited by NAC.**

(A) MDC staining analysis of the formation of autophagic vacuoles (scale bar: 5  $\mu\text{m}$ ). (B) Acridine orange staining analysis of the formation of autophagic vacuoles using acridine orange staining (scale bar: 50  $\mu\text{m}$ ). (C) Effect of NAC on the co-localization of LC3 and Lamp2 2 h after PDT using LSCM (scale bar: 10  $\mu\text{m}$ ). \*\*\*  $P < 0.001$  vs control group, ###  $P < 0.001$  vs PDT group.