

## SUPPORTING INFORMATION

### **Anchoring Effects of Surface Chemistry on Gold Nanorods: Modulates Autophagy**

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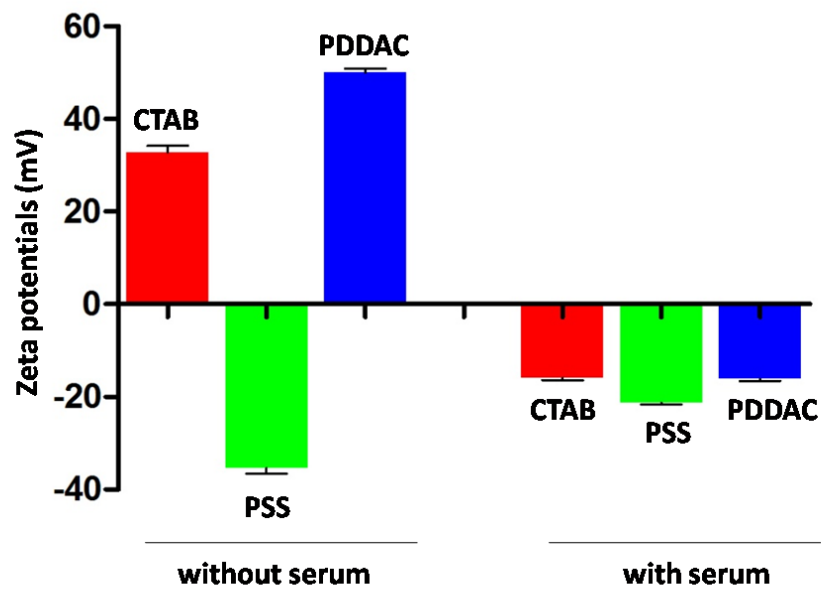
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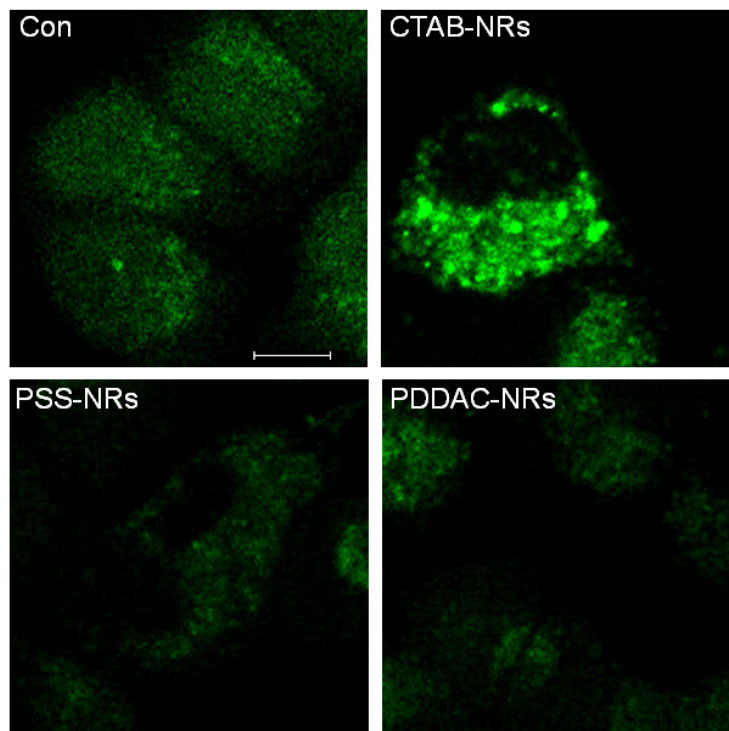
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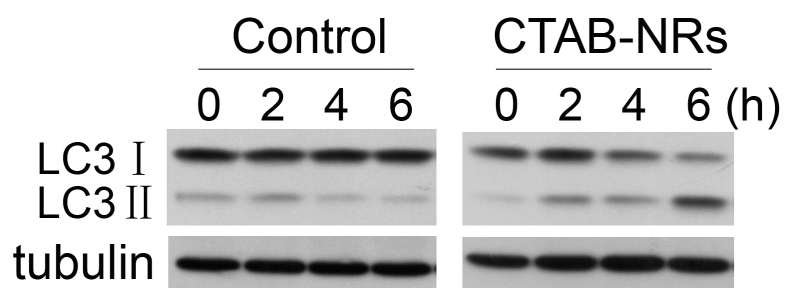


**Figure S1** Zeta potentials of Au NRs after incubation in medium with or without fetal bovine serum for 2 hours.

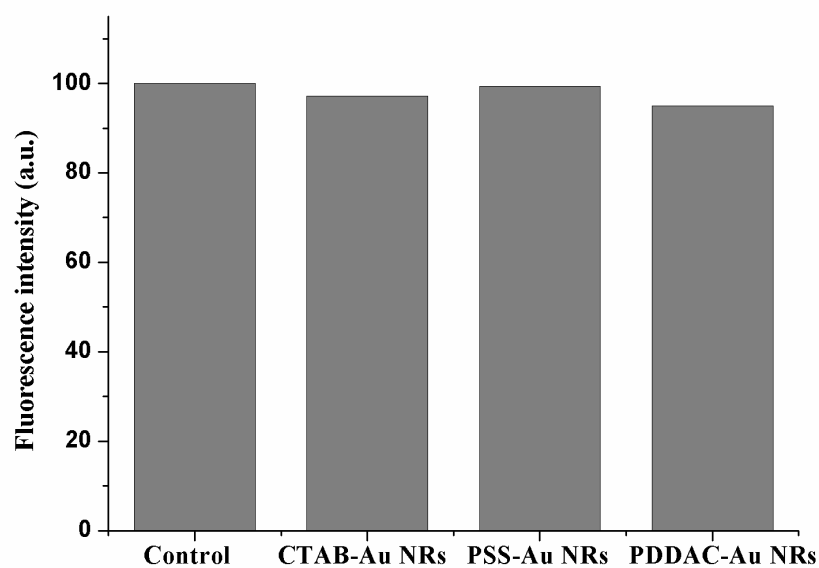


**Figure S2** Confocal microscopy images showing formation of GFP-LC3 dots in GFP-LC3 HeLa cells treated for 4 h with 70 pM of Au NRs with different surface coatings.

Con, control (untreated cells).



**Figure S3** Western blotting of LC3 in human fetal lung fibroblast (MRC-5) cells that were treated with or without CTAB-coated Au NRs at different times.



**Figure S4** Statistical analysis of the effect of different surface-coated Au NRs on lysosome pH in Figure 4b.