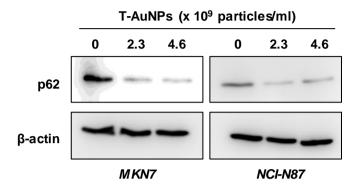
## **Supplementary Materials**

## Supplementary Table S1. DLS analysis of AuNPs, C-AuNPs and T-AuNPs

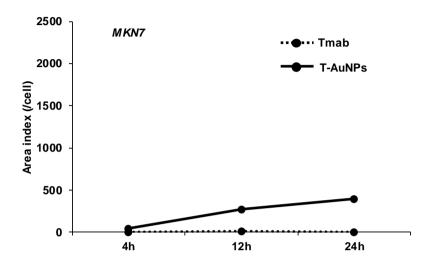
		AuNPs	C-AuNPs	T-AuNPs
Size	(nm)	$78.60 \pm 0.34$	$94.12 \pm 0.32$	$85.39 \pm 0.68$
Z potential	(mV)	$-52.83 \pm 0.93$	$-43.70 \pm 0.10$	$-39.43 \pm 0.85$

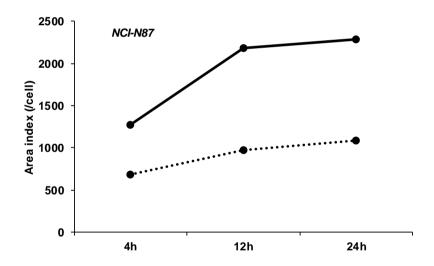
Supplementary Figure S1. Western blot analysis of the expression levels of p62 in MKN7 and NCI-N87 cells



Whole cell lysates of MKN7 and NCI-N87 cells collected at 6 hours after treatment with 2.3  $\times$  10<sup>9</sup> or 4.6  $\times$  10<sup>9</sup> particles/ml of T-AuNPs were subjected to western blot analysis of p62 (Medical & Biological Laboratories, Nagoya, Japan), an autophagy marker. Note that 4.6  $\times$  10<sup>9</sup> particles/ml was the IC50 dose of T-AuNPs on NCI-N87 cells and this concentration was used in most in vitro experiments.

Supplementary Figure S2. Binding capacity of Tmab and T-AuNPs on MKN7 and NCI-N87 cells





Area index of red color on the cell surface at each time point in Figure 4C was quantified by the Image J software.