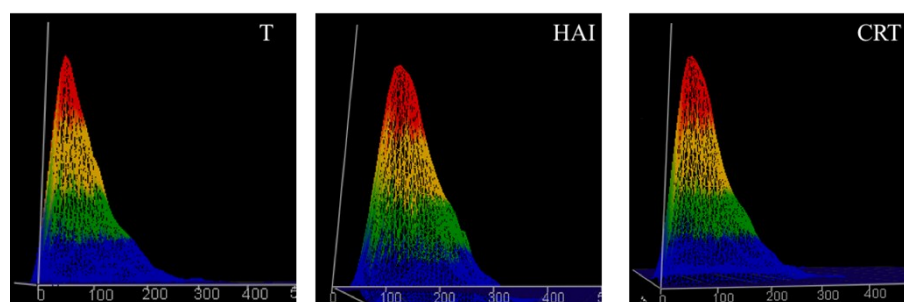
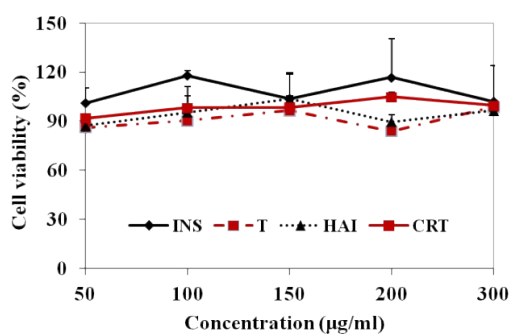


## Supplementary Materials

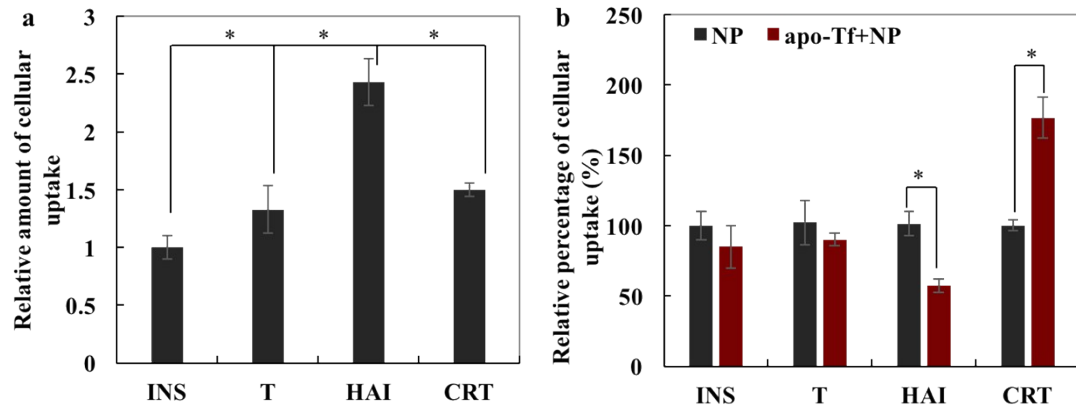
### SUPPLEMENTARY FIGURES



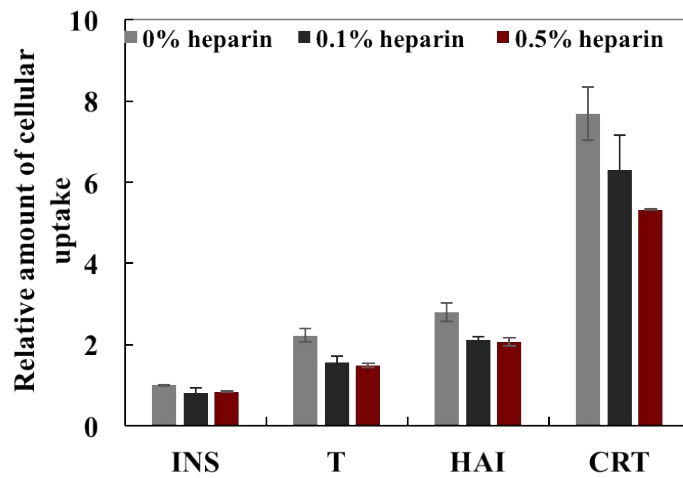
**Supplementary Figure S1.** Characterization of different NPs by a Nano Sight LM10 system.



**Supplementary Figure S2.** Cytotoxicity of different formulations on Caco-2 cells at different concentration.



**Supplementary Figure S3.** Amounts of INS internalized by Caco-2 cells determined by flow cytometry (a) in the absence of apo-Tf (b) in the presence of apo-Tf.



**Supplementary Figure S4.** Relative amount of cellular uptake after washing with heparin.

## SUPPLEMENTARY TABLES

Table S1. Characteristics of the NPs

Samples	Size (nm)	Zeta potential (mV)	Drug Loading %
T	133.4±10.5	43.6±0.9	25.0±2.1
HAI	177.6±2.7	26.3±01.5	20.4±1.8
CRT	204.3±12.2	23.1±0.3	22.9±2.1