Electronic Supplementary Material (ESI) for Biomaterials Science

Supplementary Information

Structure Effect of Carbon Nanovectors in Regulation of Cellular Responses

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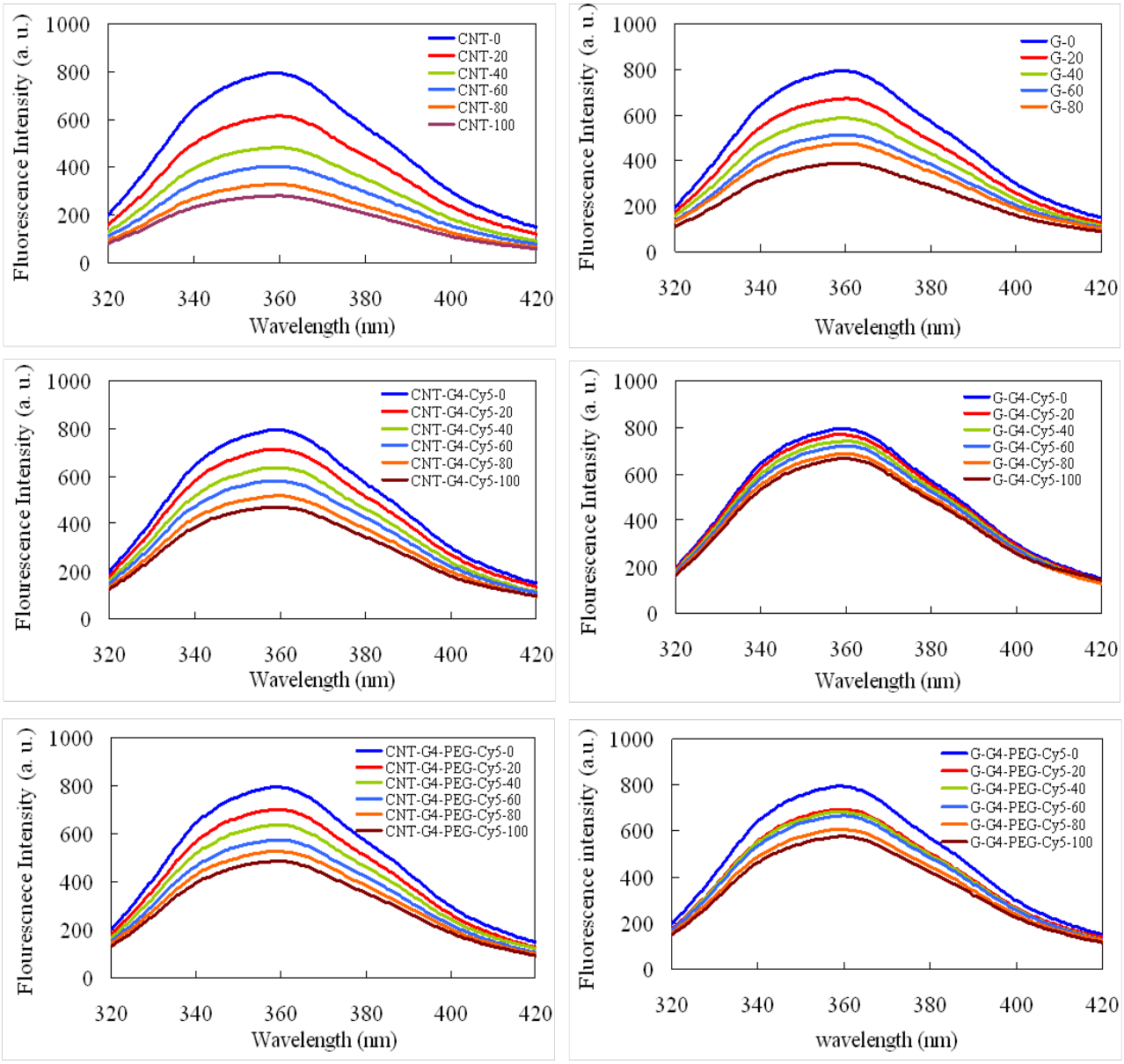

Figure S1. Effect of CNT and G nanosystems on the emission spectra of BSA (λ_{Ex} = 295 nm).

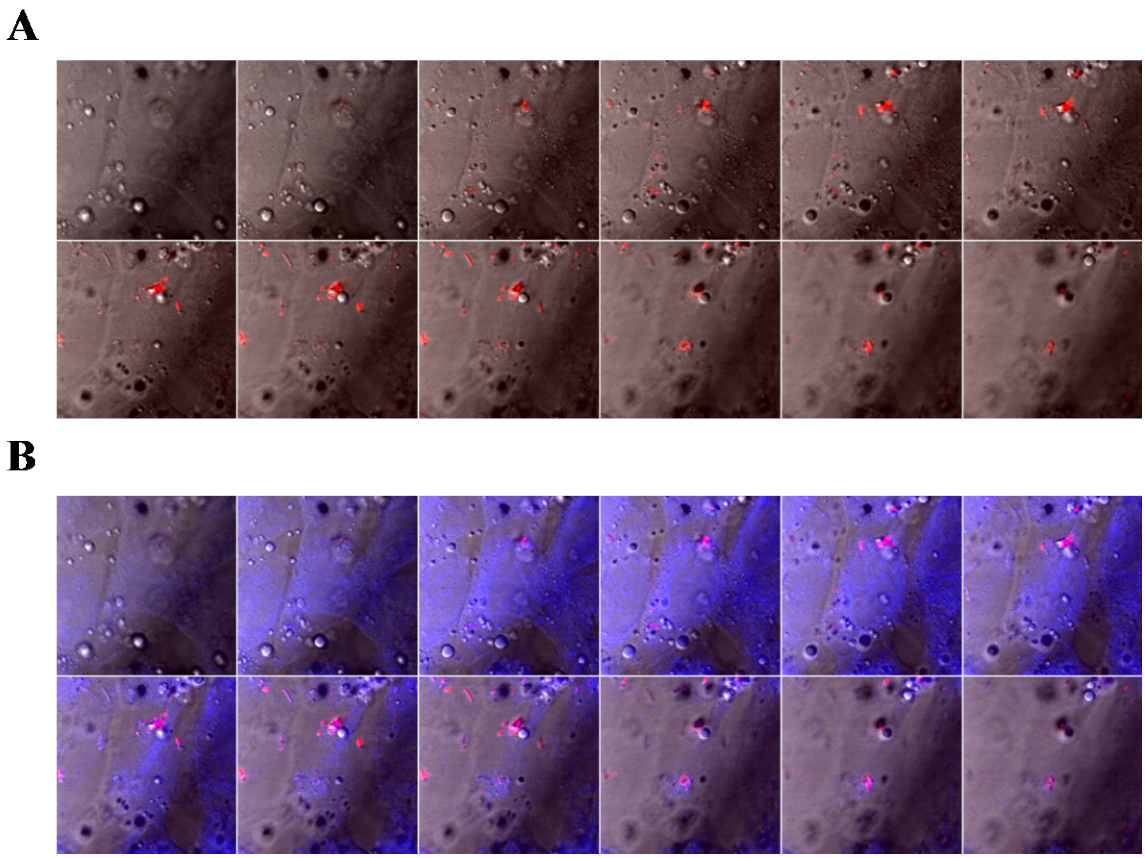

Figure S2. Z-stack images show the cellular internalization CNT-G4-PEG-Cy5 in MCF-7 cells after 24 min incubation. The 12 Z-slices are taken from the bottom of the cells to the top. The slices confirm that at 24 h the CNT-G4-PEG-Cy5 nanoparticles are localized in the pronuclear region of the cells. (A) Image of the CNT-G4-PEG-Cy5; (B) Merged image of the nuclei stained with blue DAPI, FITC or G-G4-PEG-Cy5 and differential interference contrast (DIC).

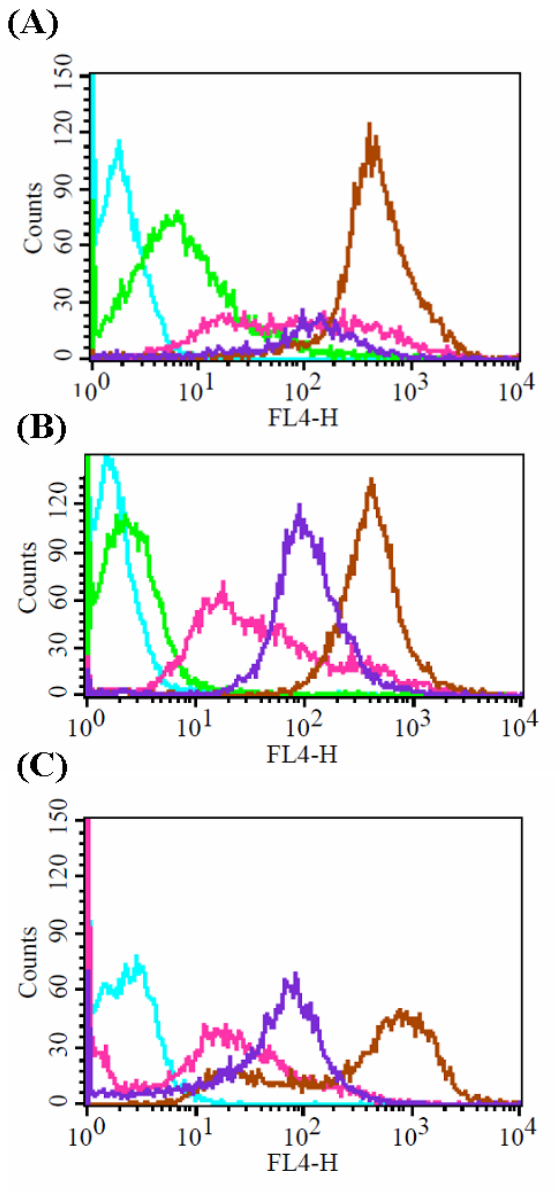

Figure S3. Flow cytometric studies of internalization of CNT and G conjugates in MCF-7 cells at (A) 8 h, (B) 16 h and (C) 36 h.

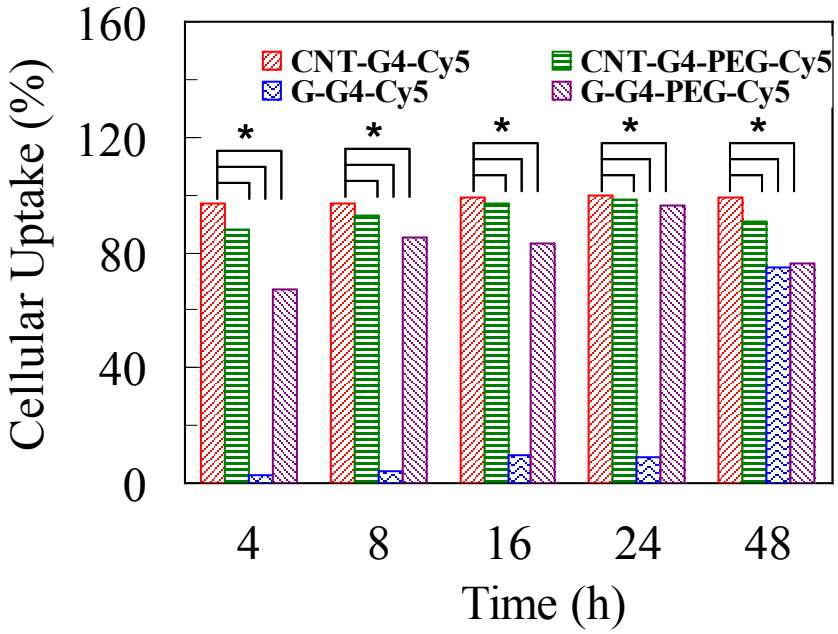

Figure S4. Flow cytometry data showing the relative uptake of CNT and G conjugates in MCF-7 cells. The number of positively labeled cells was represented as the percentage of total cell counts; *P<0.05.

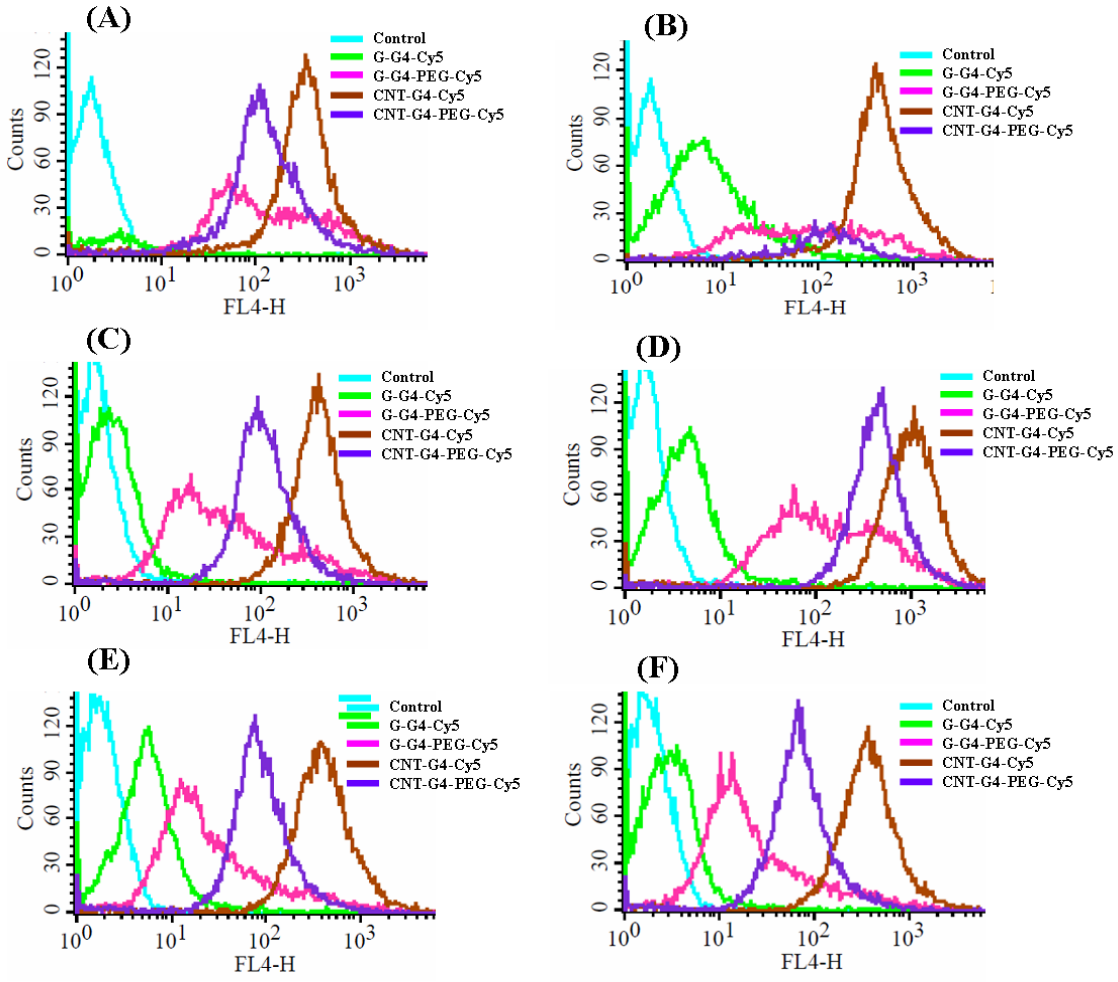

Figure S5. Flow cytometric studies of internalization of CNT and G conjugates in H460 cells at (A) 4 h, (B) 8 h, (C) 16 h, (D) 24 h, (E) 36 h and (F) 48 h.

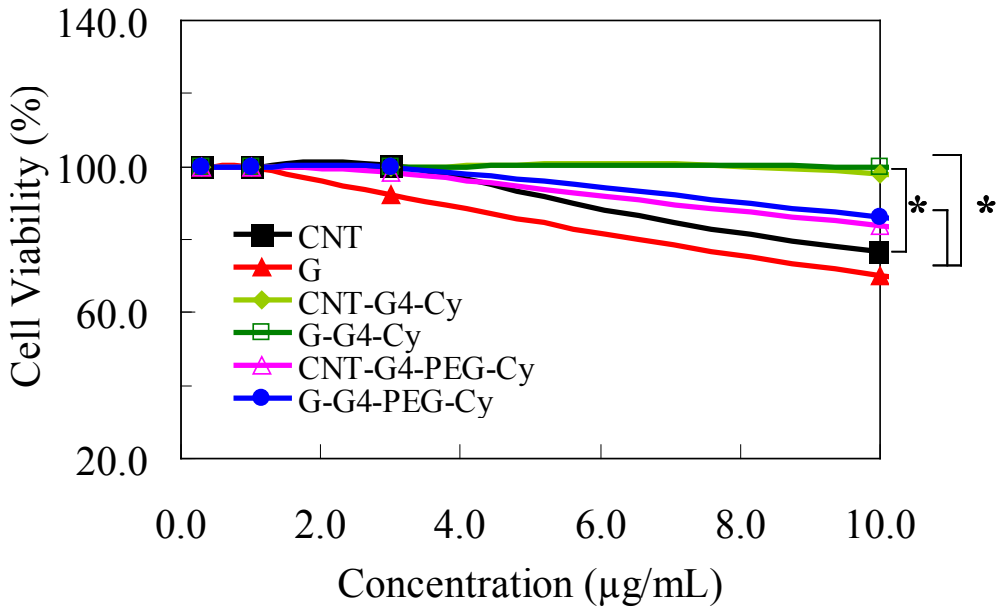

Figure S6. Results of PI (propidium iodide) cytotoxicity assay on H460 lung cancer cells after an incubation period of 72 h with various samples of CNT at concentrations ranging from 0-10 μg/mL; *P<0.05.