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## Article Biotin-Decorated PAMAM G4.5 Dendrimer Nanoparticles to Enhance the Delivery, Anti-Proliferative, and Apoptotic Effects of Chemotherapeutic Drug in Cancer Cells

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## The standard curve of gemcitabine

The drug loading and encapsulation efficiency of gemcitabine was estimated by UV -Visible spectrophotometer using standard curve at 269 nm wavelength





**Figure S1.** UV- Visible spectrophotometer study of gemcitabine. A) The absorbance of free gemcitabine at different concentration and B) The standard curve of free gemcitabine in PBS.

## UV -Visible spectra of Fluorescein isothiocyanate (FITC)

PG4.5 –DETA-Biotin was tagged with FITC probe and the conjugation was characterized with UV-Visible spectrophotometer at 492 nm wavelength.





**Figure S2.** UV- Visible spectrophotometer study of FITC. A) The full adsorption wavelength spectrum of FITC and the PG4.5-DETA-Biotin B) The absorbance of FITC for different concentration and C) The standard curve of FITC in PBS.



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