Supporting Information

Antitumor Properties of Platinum(IV) Prodrug-Loaded Silk Fibroin Nanoparticles

*A. Abel Lozano-Pérez, Ana L. Gil, Sergio Pérez, Natalia Cutillas, Hajo Meyer, Mónica Pedreño, Salvador Aznar-Cervantes, Christoph Janiak, Jose Luis Cenis, and José Ruiz**

Table of Contents

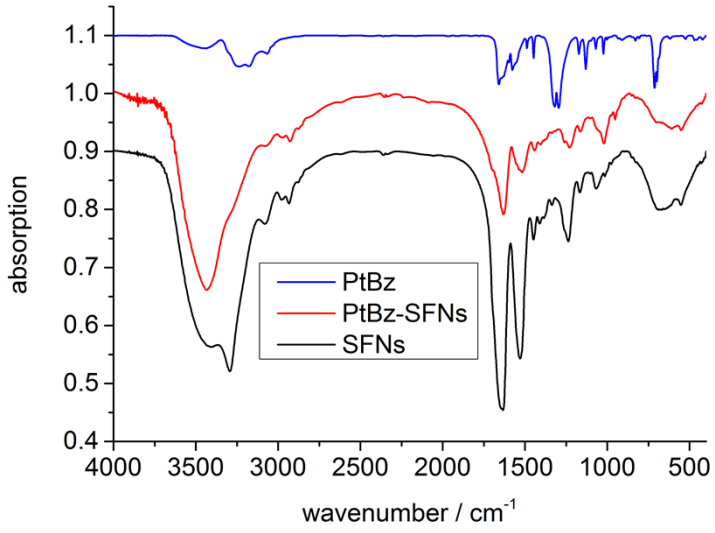

Figure S1. IR spectra of PtBz (blue), PtBz-SFNs (red) and SFNs (black).

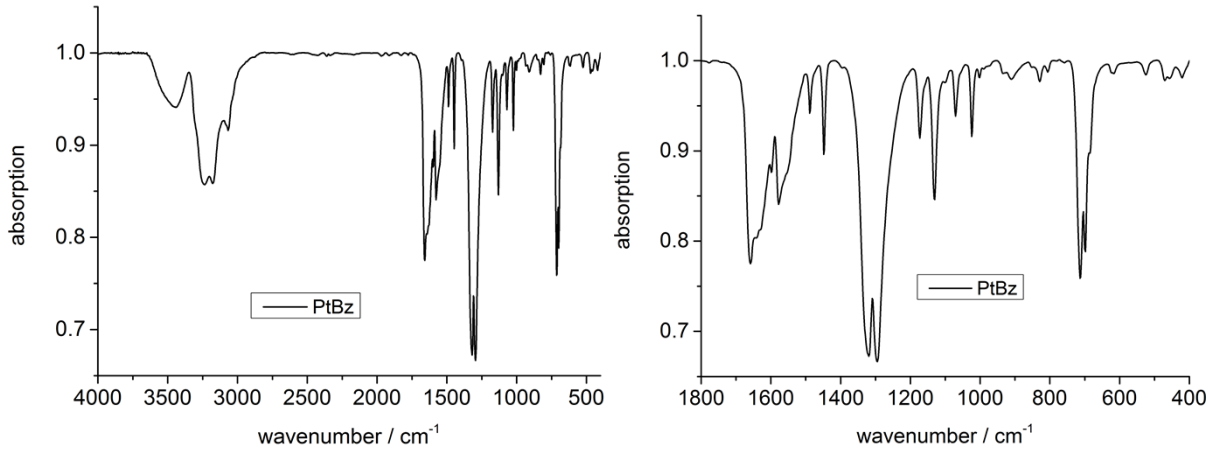

Figure S2. IR spectra of pure PtBz.

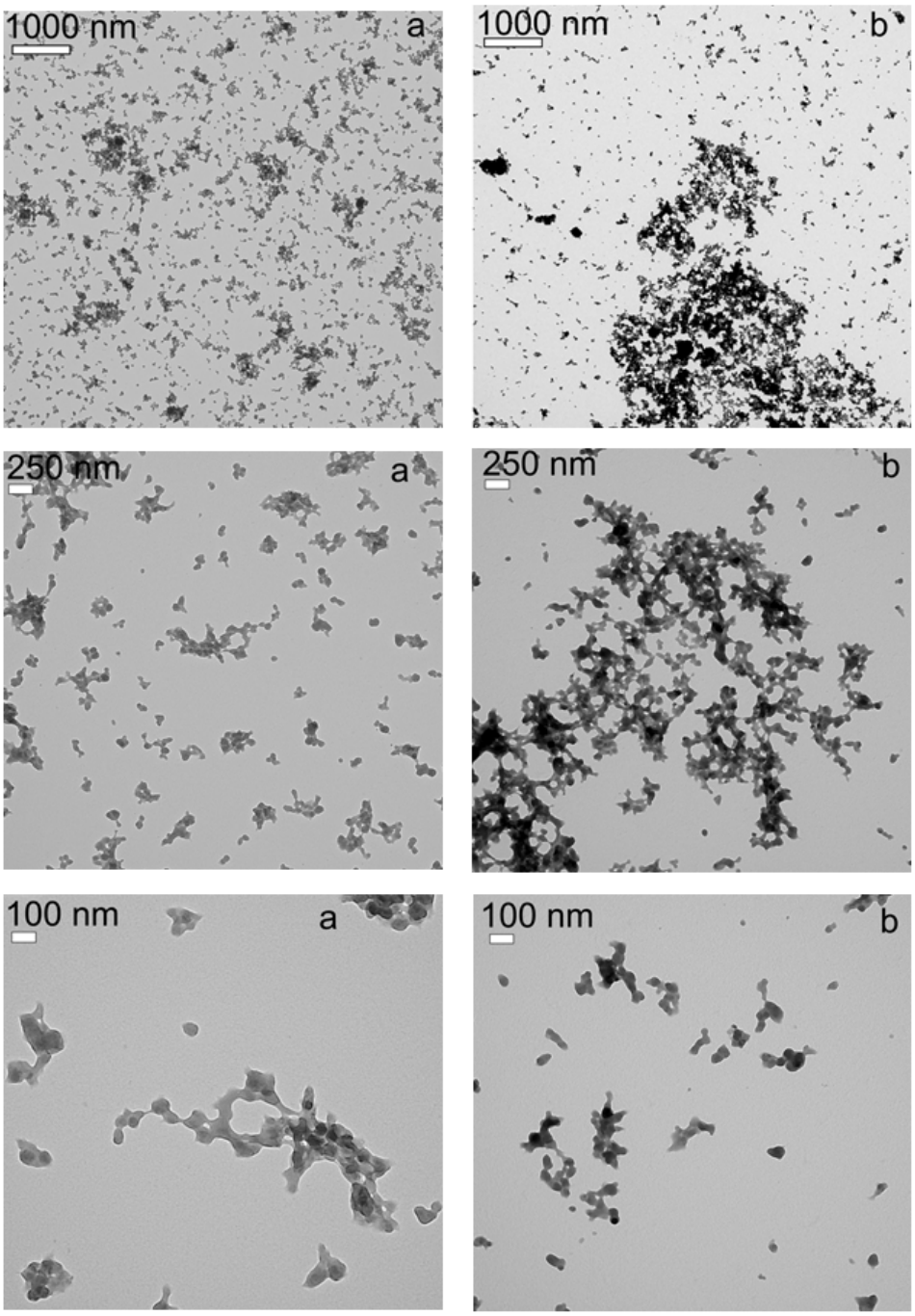

Figure S3. TEM pictures of SFNs (a) and PtBz-SFNs (b) at different magnifications.

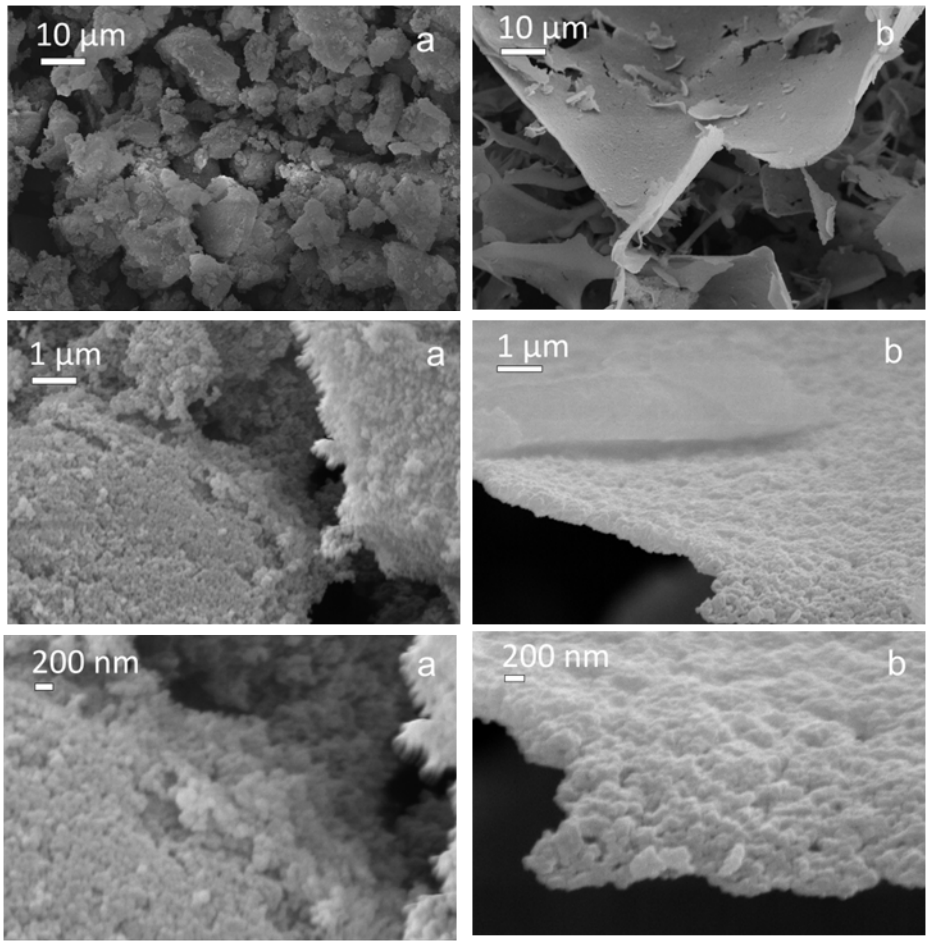

Figure S4. SEM pictures of SFNs (a) and PtBz-SFNs (b) at different magnifications.

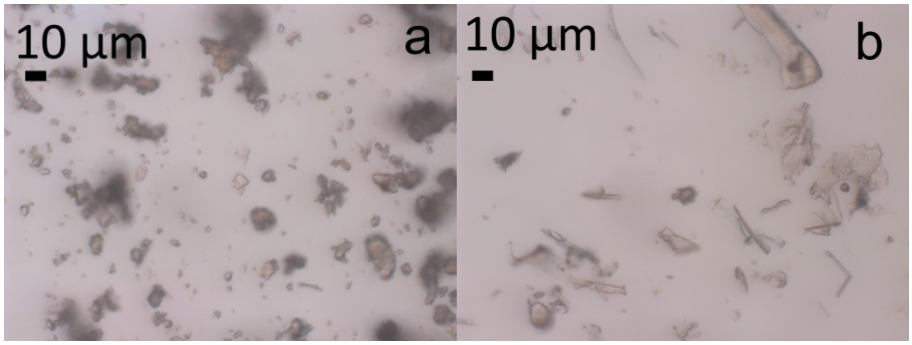

Figure S5. Light microscope pictures of SFNs (a) and PtBz-SFNs (b) at 630-times magnified.

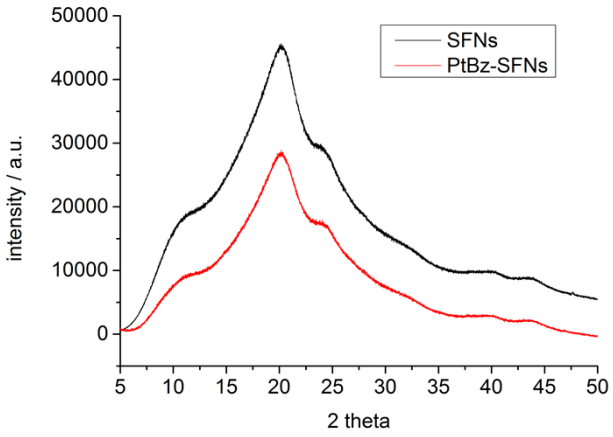

Figure S6. XRD of SFNs (black) and PtBz-SFNs (red).

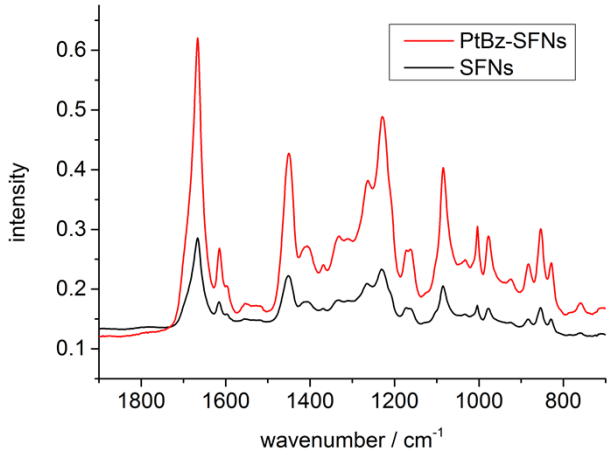

Figure S7. Raman spectra of SFNs (black) and PtBz-SFNs (red).

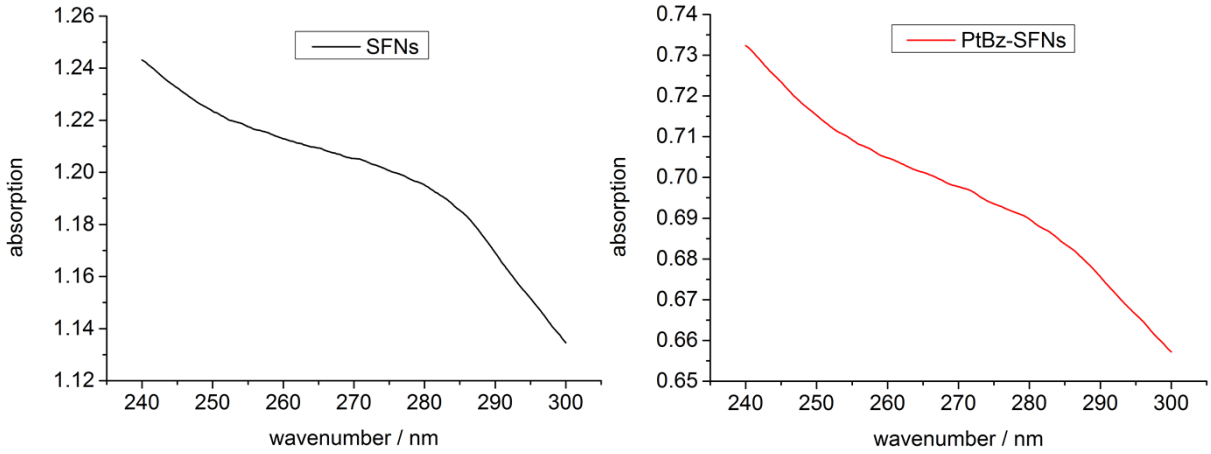

Figure S8. UV-spectra of aqueous solutions of SFNs (black) and PtBz-SFNs (red) (c = 1 mg/mL).

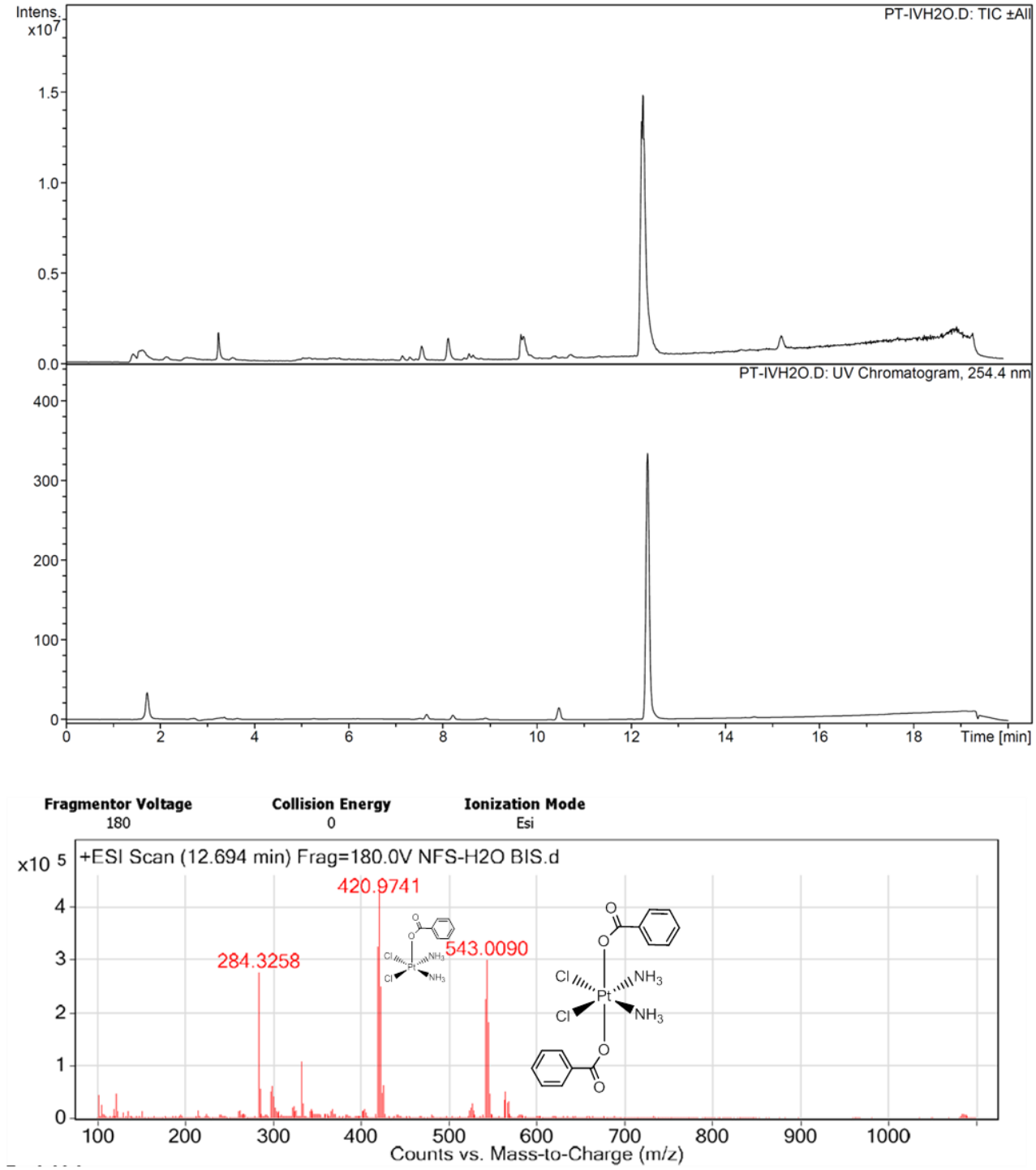

Figure S9. HPLC-MS study from release in water after 10 days from PtBz-SFNs at 37 °C.

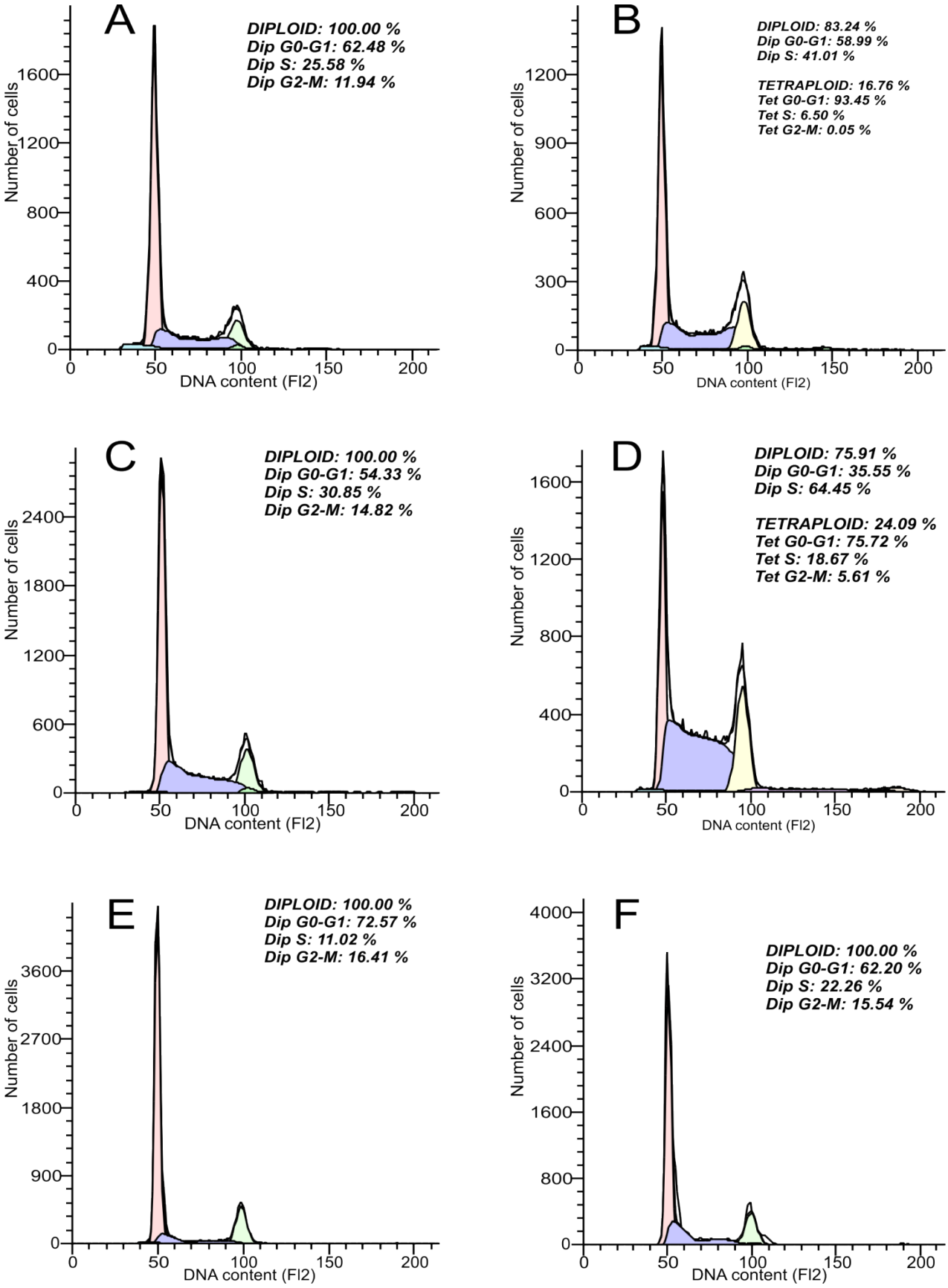

Figure S10. Cell cycle analysis of MCF-7, MDA-MB-231 and SK-BR-3 human breast cancer cells after 24 h at 310 K. A), C) and E) FL2 histograms for negative controls: cells untreated (MCF-7, MDA-MB-231 and SK-BR-3, respectively); B), D) and F) FL2 histograms for cells exposed to PtBz-SFNs, concentration used was 0.5 μM.

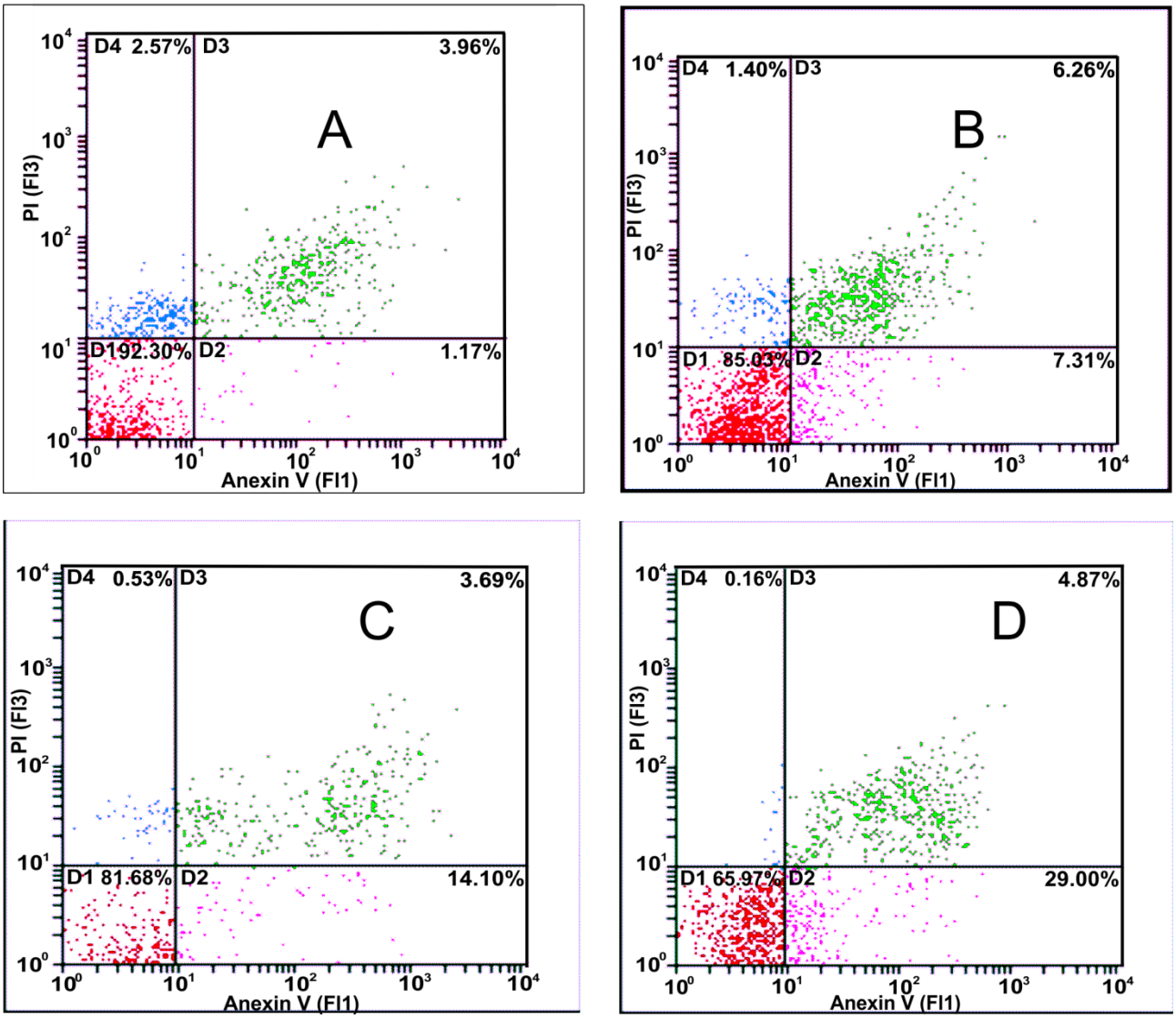

Figure S11. Flow cytometry analysis of A2780 and A2780cisR human ovarian cancer cells after treatment with PtBz-SFNs as detected by annexin V/PI. Density plots for A) and C) untreated cells (control) and for B) and D) cells treated with 1 μM (24 h) PtBz-SFNs.

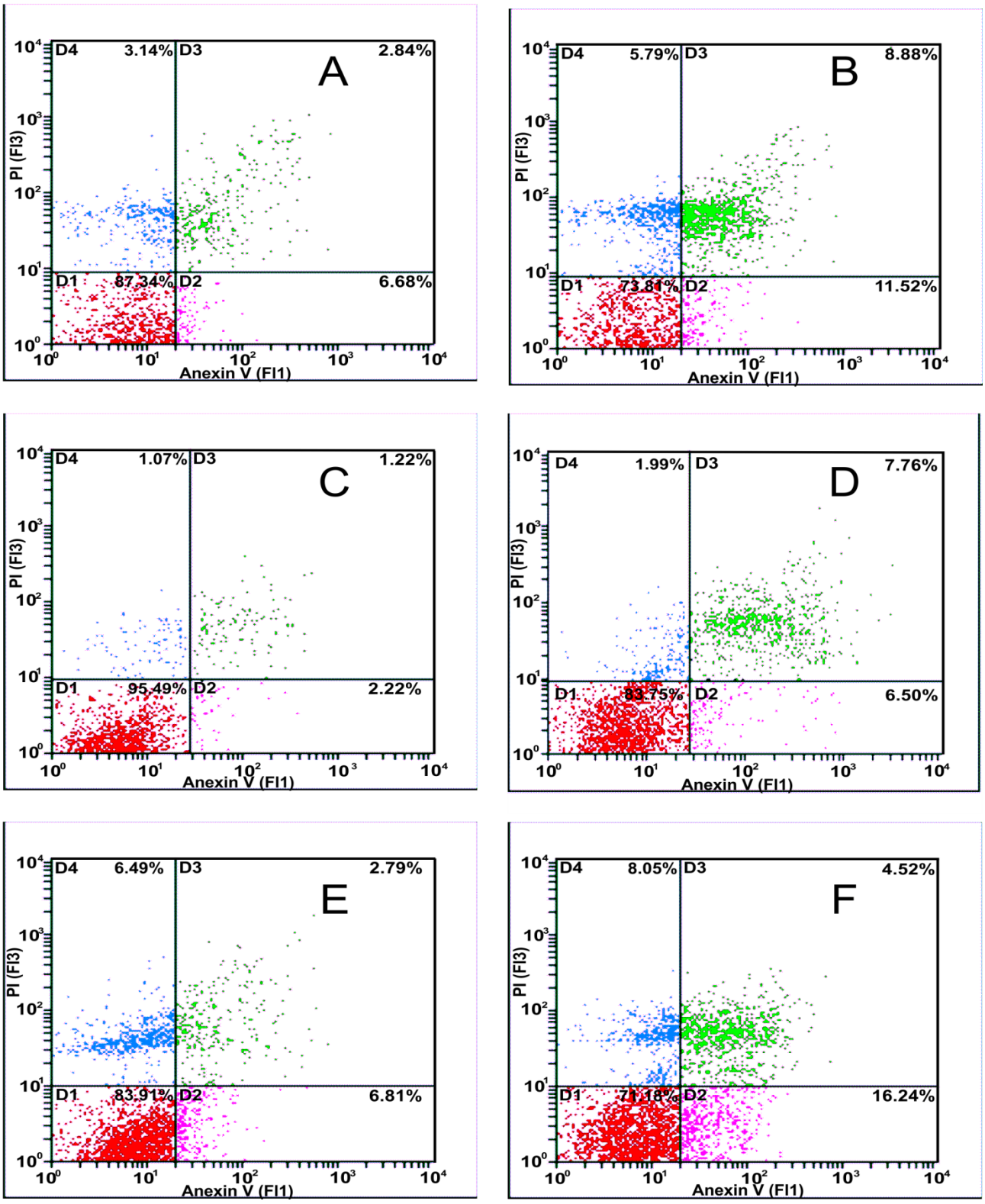

Figure S12. Flow cytometry analysis of MCF-7, MDA-MB-231 and SK-BR-3 human breast cancer cells after treatment with PtBz-SFNs as detected by annexin V/PI. Density plots for A), C) and E) untreated cells (control) and for B), D) and F) cells treated with 1 μM (24 h) PtBz-SFNs.