Tumor-Targeting Oxidative Stress Nanoamplifiers as Anticancer Nanomedicine with Immunostimulating activities

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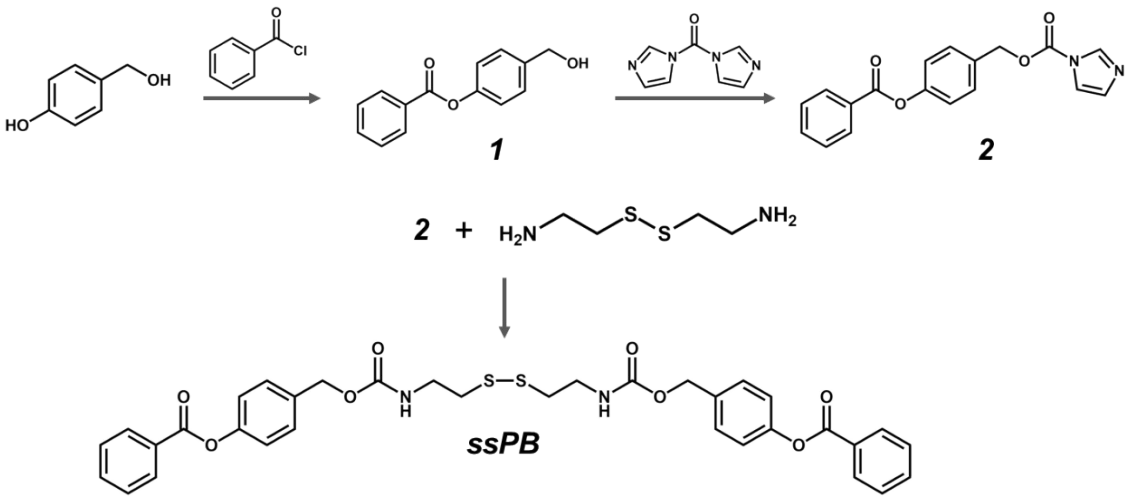

Figure S1. A synthetic route of ssPB.

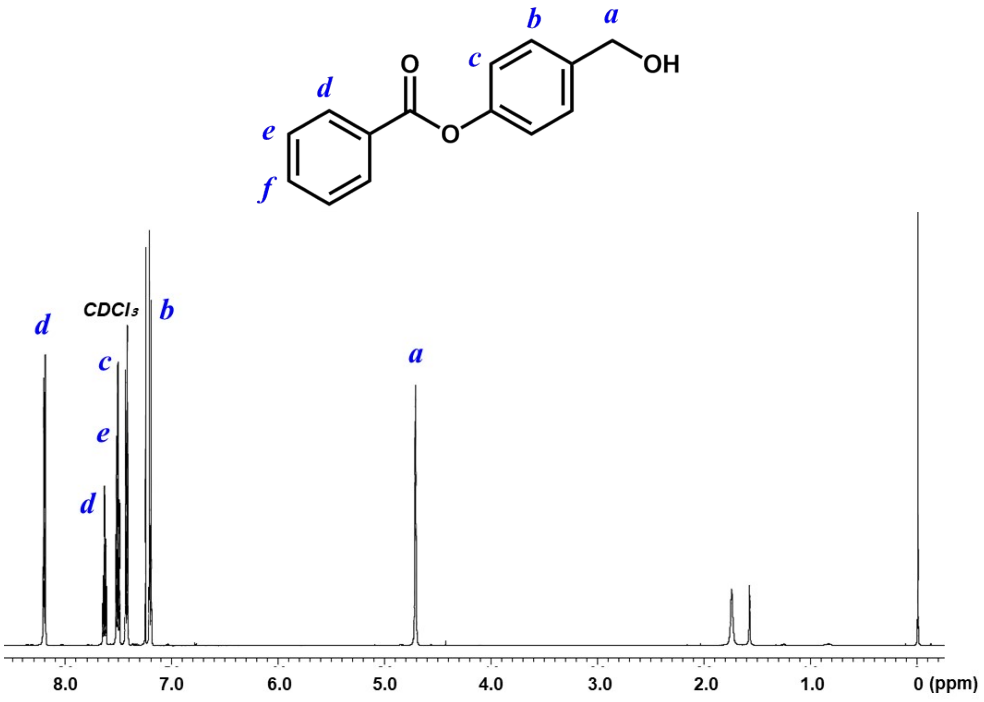

Figure S2. ^{1}H NMR spectrum of Compound ***1*** recorded in $CDCl_3$.

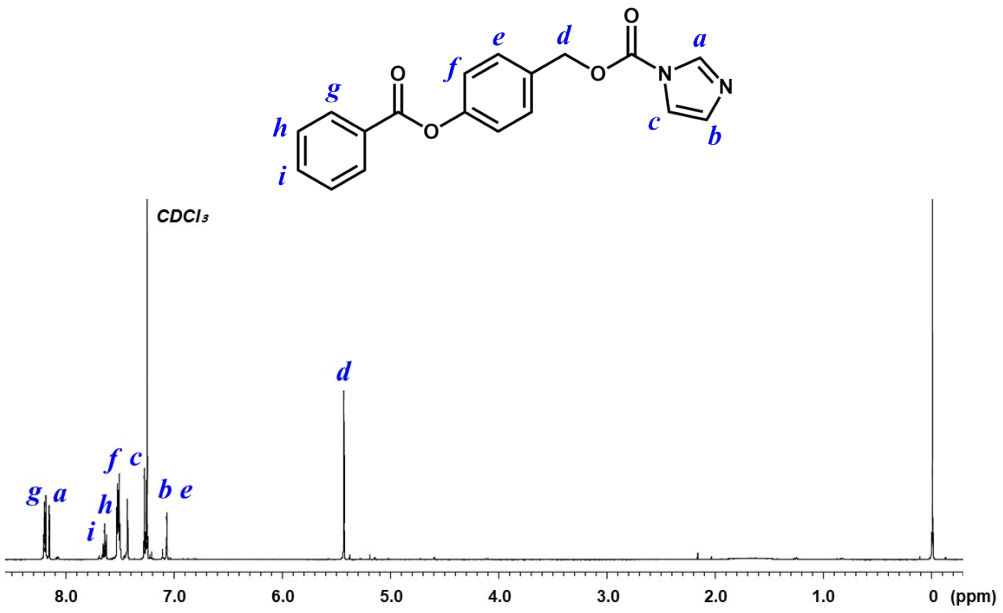

Figure S3. ^{1}H NMR spectrum of Compound ***2*** recorded in $CDCl_3$.

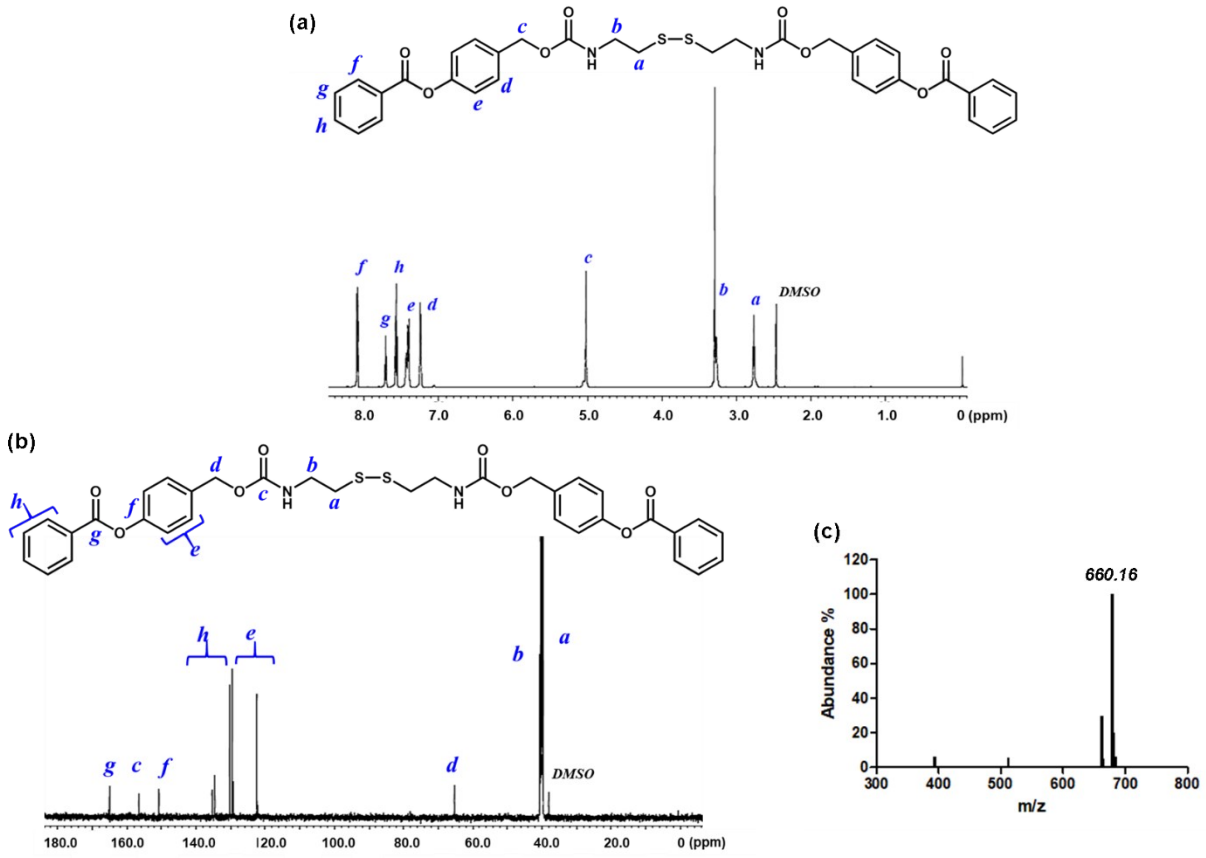

Figure S4. Characterization of ssPB. (a) ^{1}H NMR spectrum and (b) ^{13}C NMR spectrum. (c) LC/MS spectrum.

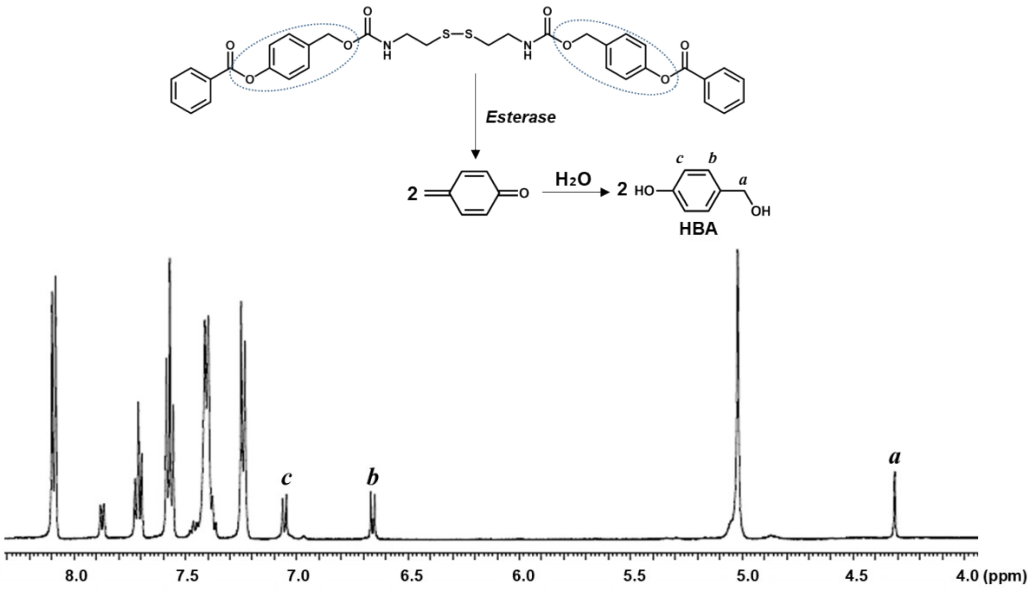

Figure S5. ^{1}H NMR spectrum of ssPB after esterase-triggered hydrolysis under aqueous condition.

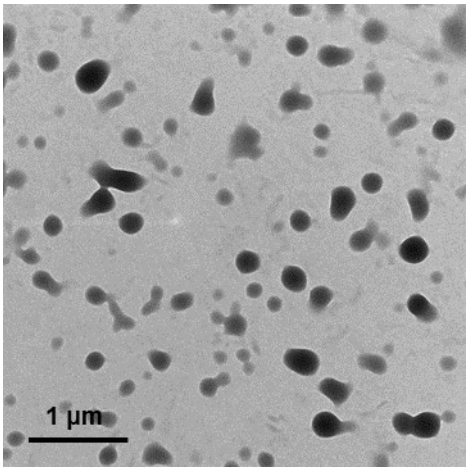

Figure S6. TEM micrograph of F-ssPB nanoassemblies dispersed in PBS.

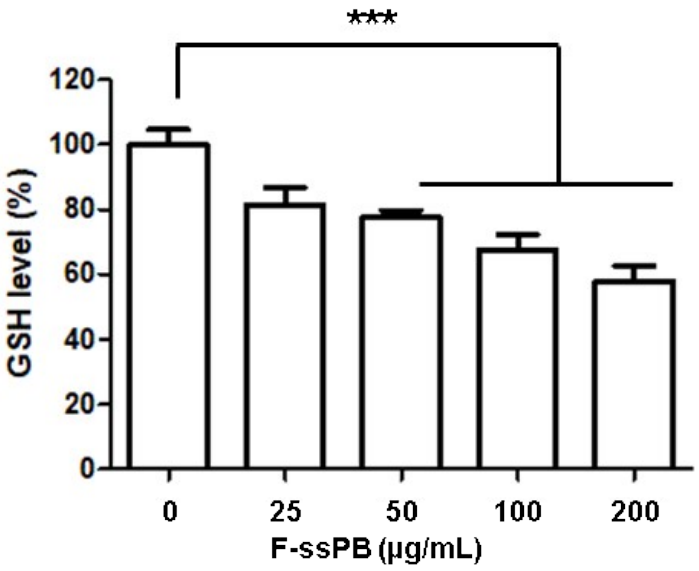

Figure S7. Depletion of GSH by F-ssPB nanoparticles in DU145 cells. Values are mean ± s.d. (n=4). *** $p<0.001$.

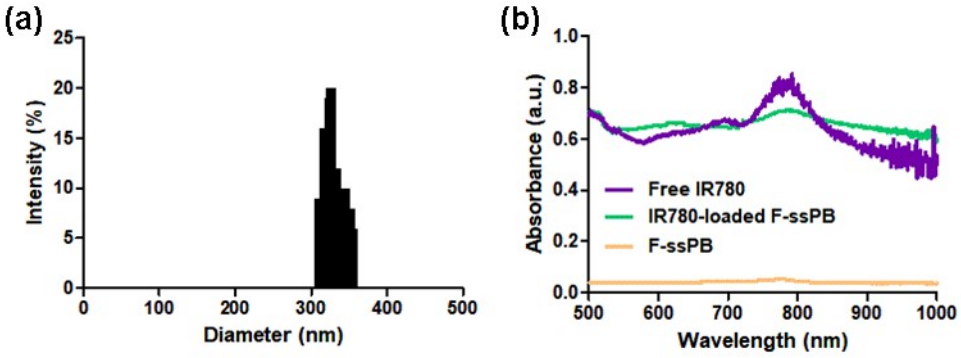

Figure S8. Characterization of IR780-loaded F-ssPB nanoparticles. (a) Size and size distribution determined by dynamic light scattering. (b) UV-vis absorbance.

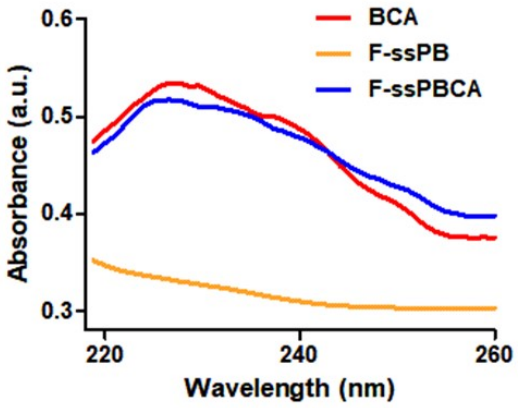

Figure S9. UV absorbance of BCA, F-ssPB and F-ssPBCA.

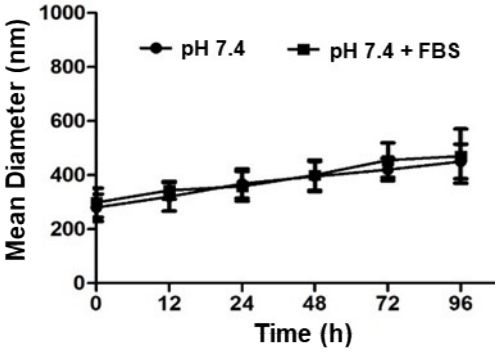

Figure S10. Changes in the hydrodynamic diameter of F-ssPBCA nanoparticles during incubation in the presence or absence of FBS (10 wt%).

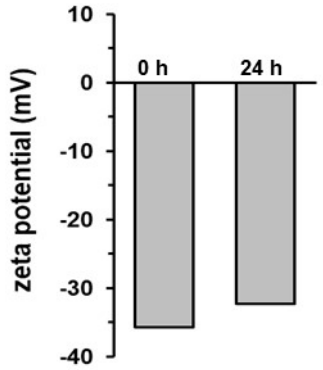

Figure S11. Zeta potential of F-ssPBCA nanoparticles dispersed in PBS.

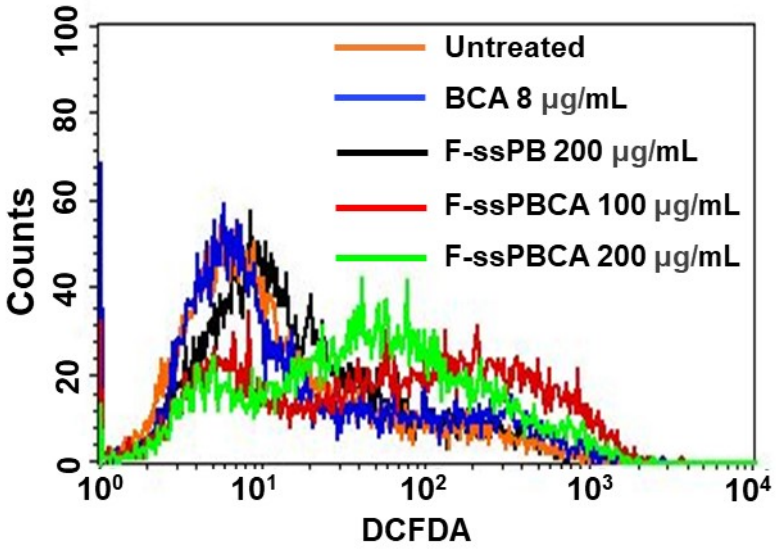

Figure S12. Flow cytometric analysis of ROS accumulation in cells treated with BCA, F-ssPB and F-ssPBCA nanoparticles.

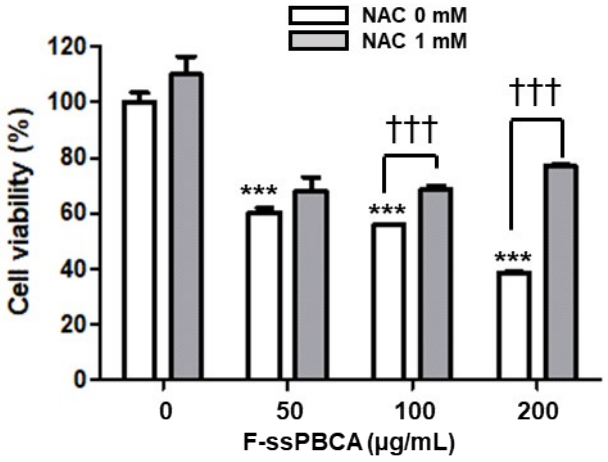

Figure S13. The effects of antioxidant NAC on the cytotoxicity of F-ssPBCA nanoparticles against DU145 cells. Values are mean ± s.d. (n=4). *** $p<0.001$ relative to F-ssPBCA 0 μg/mL. ††† $p<0.001$.

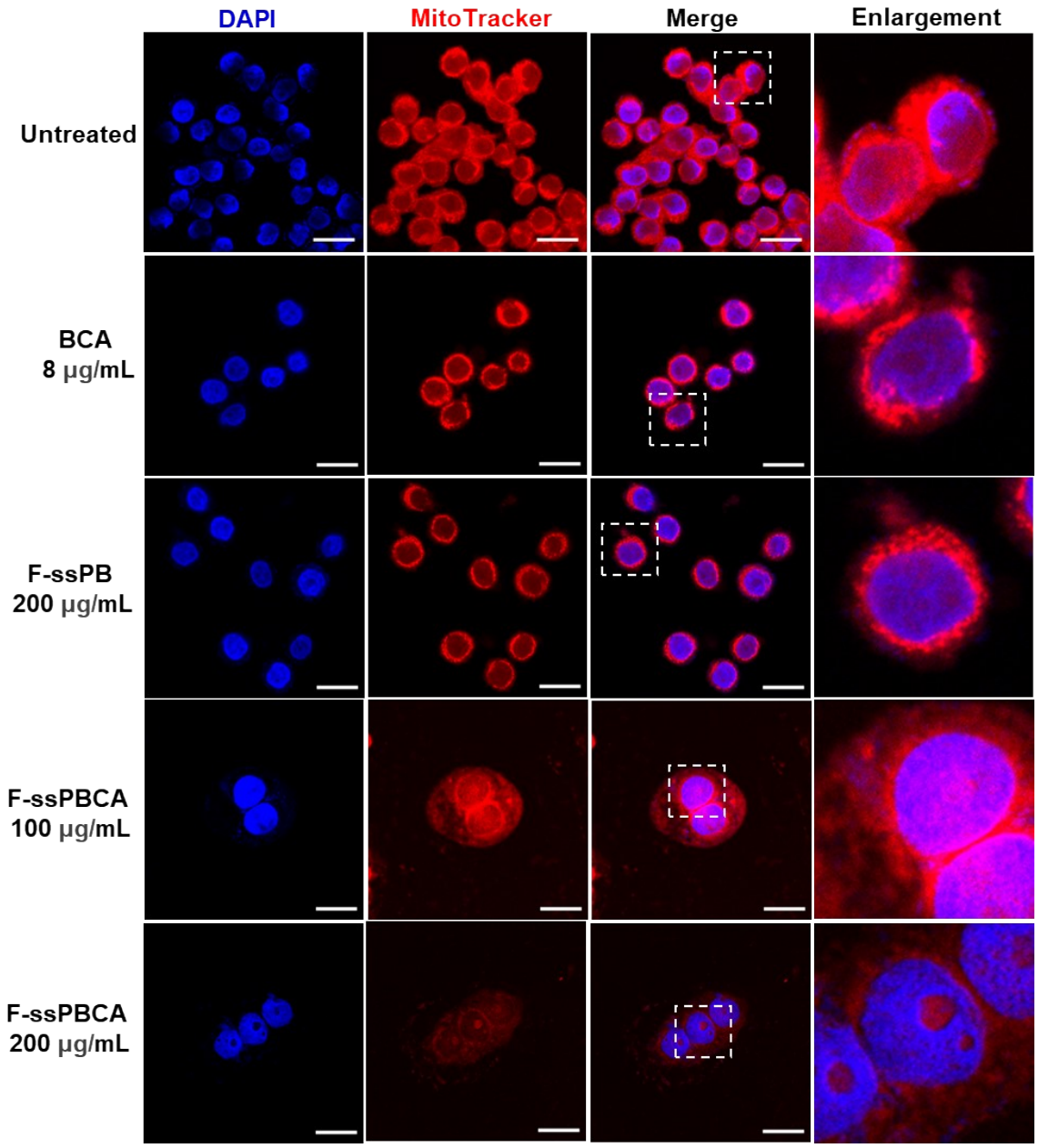

Figure S14. Fluorescence images of cells stained with MitoTracker Red. Nuclei were stained with DAPI. The scale bar is 20 μm.

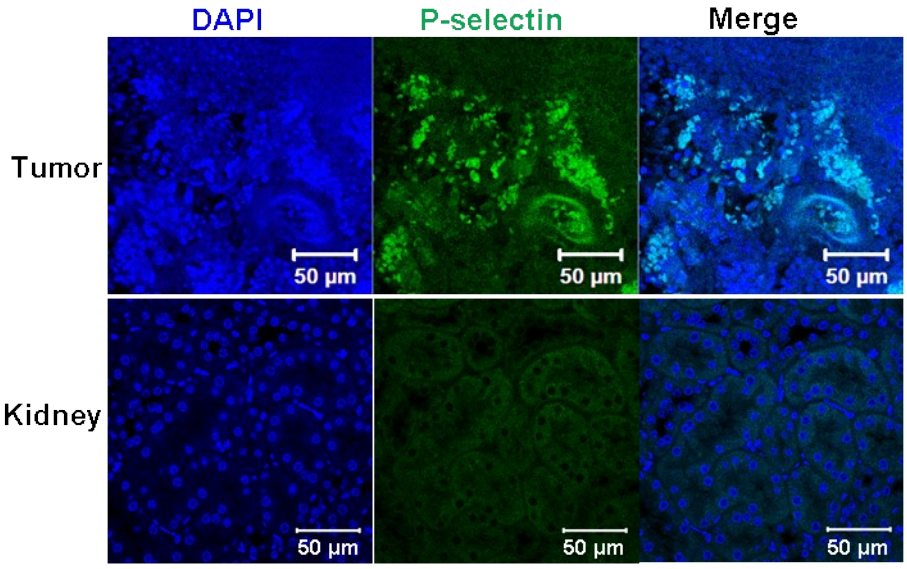

Figure S15. Immunofluorescence images of SW620 tumor and kidney tissues stained with p-selectin antibody and DAPI.

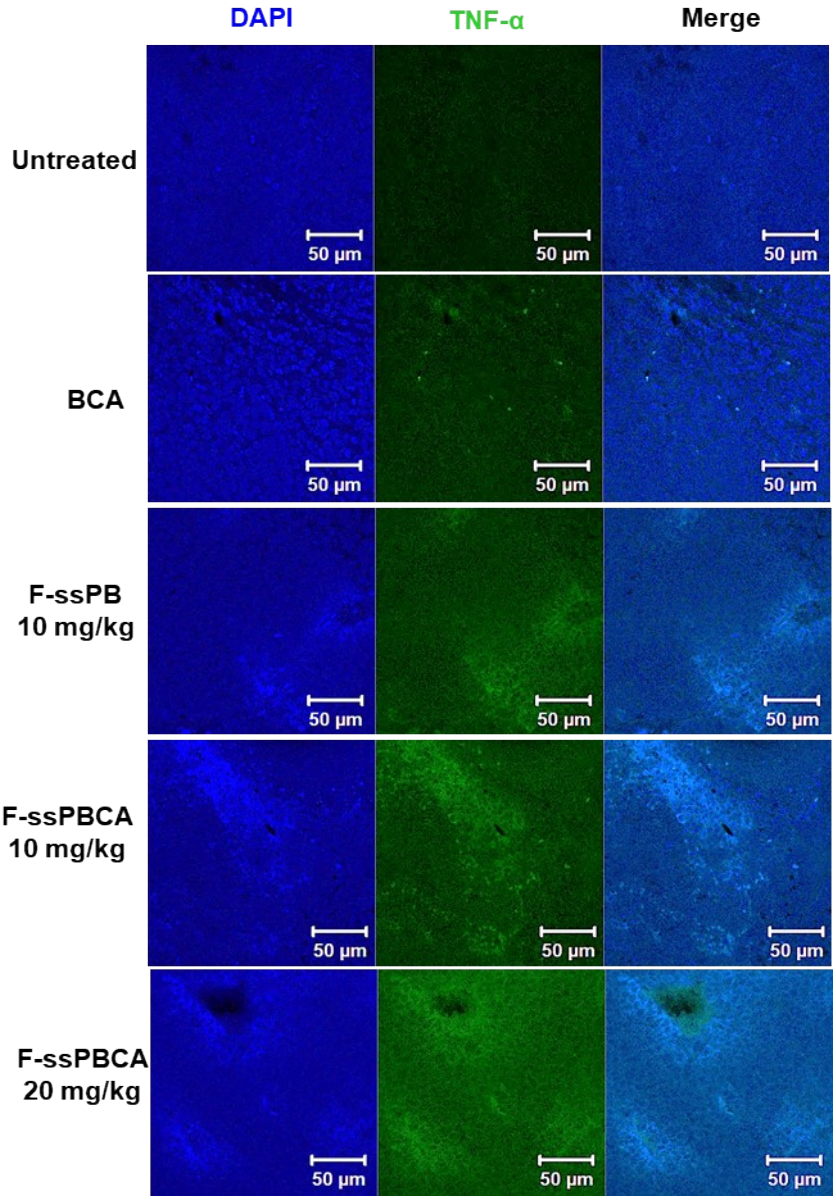

Figure S16. Micrographs of tumor tissues stained with anti TNF-α.

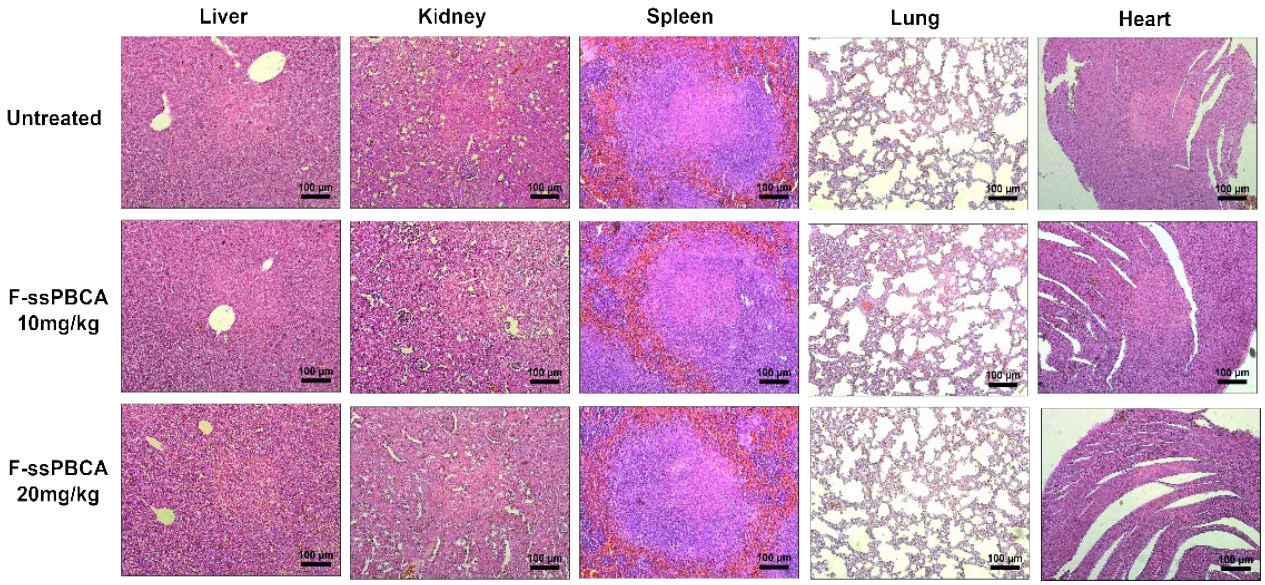

Figure S17. Representative H&E staining images of major organs from various groups. Tissues were excised after finishing *in vivo* study.

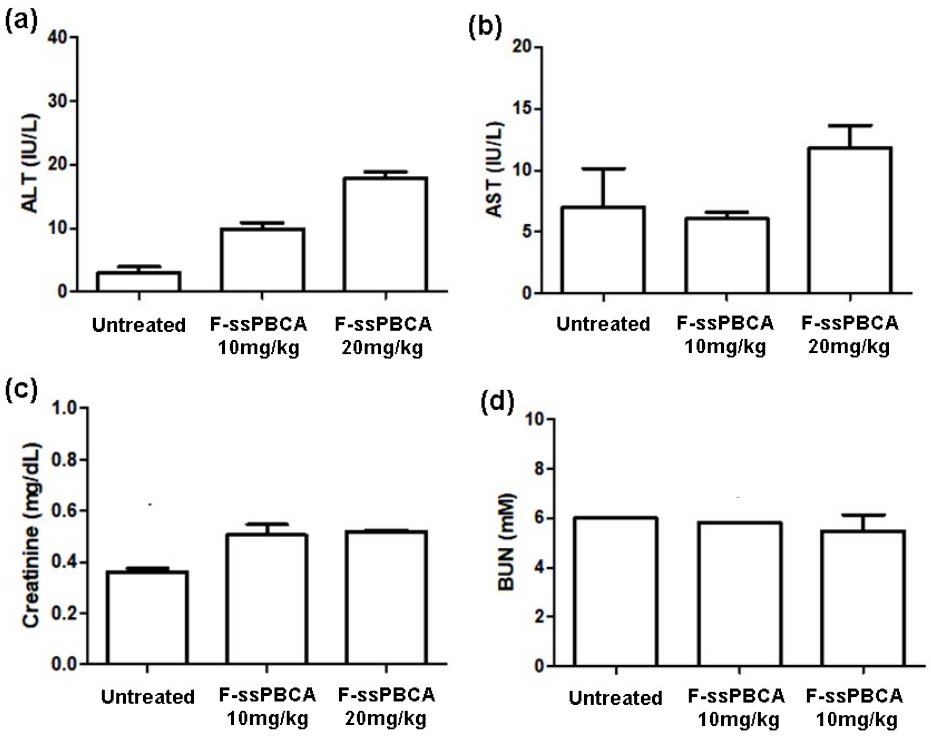

Figure S18. The effects of F-ssPBCA nanoparticles on hepatic and renal functions. (a) ALT, (b) AST, (c) creatinine and (d) BUN. Data are represented as the mean ± SD.