Electronic Supplementary Information

Hydrogel nanocarrier encapsulated recombinant IκBα as a novel anticancer protein therapeutics

Subhamoy Banerjee^a, Amaresh Kumar Sahoo^b, Arun Chattopadhyay^{b,c}, Siddhartha Sankar Ghosh^{a,b}*

Received (in XXX, XXX) Xth XXXXXXXX 20XX, Accepted Xth XXXXXXXX 20XX DOI: 10.1039/b000000x

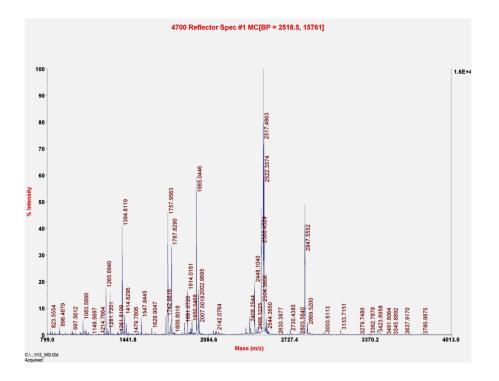


Fig. S1 Trypsin digestion profile of GST-I κ B α by MALDI-TOF experiment. 10% sequencematch was found by comparing with the MASCOT database.

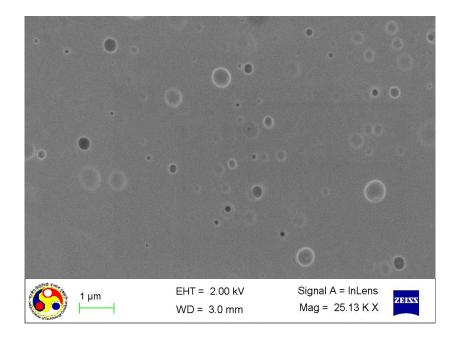


Fig. S2 FESEM image of GST-IκBα loaded hydrogel nanoparticles.

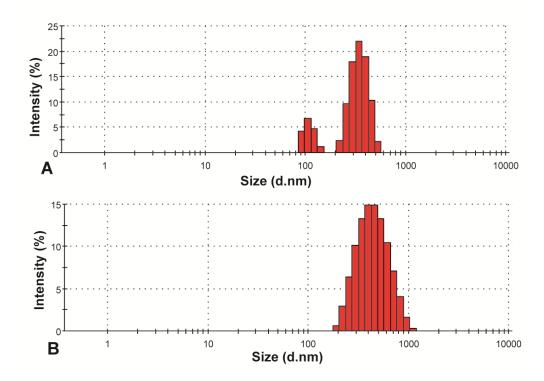


Fig. S3 Dynamic light scattering data for (A) blank hydrogel Nanoparticle (average diameter 420 nm) and (B) protein loaded hydrogel nanoparticle (average diameter 421 nm).

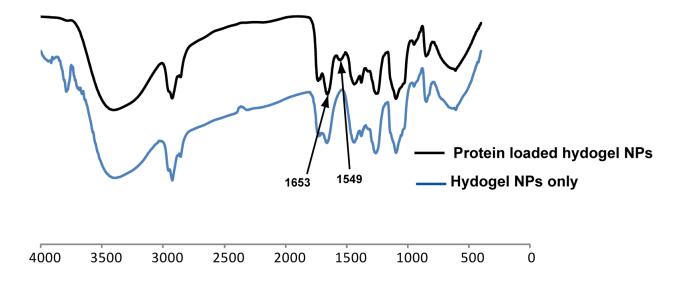


Fig. S4 FTIR spectra of (A) protein loaded PVA/PVP hydrogel and (B) only PVA/PVP hydrogel.

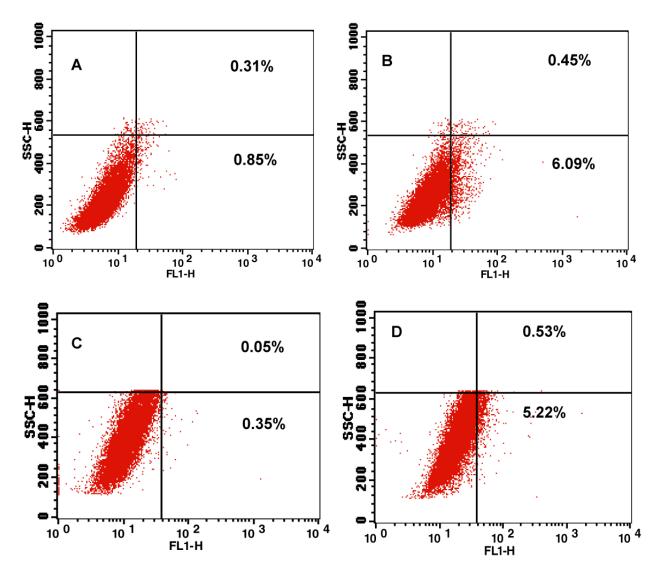


Fig. S5 Dot plot analysis of FITC-Dextran encapsulated hydrogel delivery to (B) HeLa cells and (D) U87MG cells, whereas (A) untreated HeLa and (C) untreated U87MG.

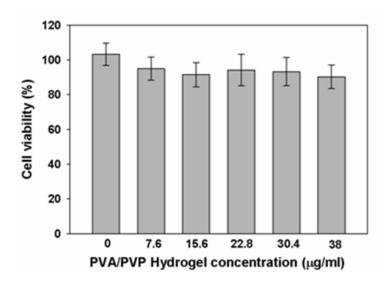


Fig. S6 Cell viability assay of HeLa cells treated with different concentrations of blank hydrogel. All data are represented as mean \pm SD of three individual experiments.

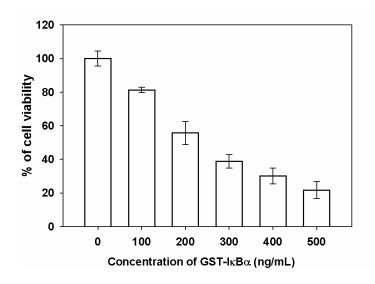


Fig.S7 Cell viability assay of normal cell line (HEK cells) treated with different concentrations of hydrogel encapsulated GST-I κ B α . All data are represented as mean \pm SD of three individual experiments.

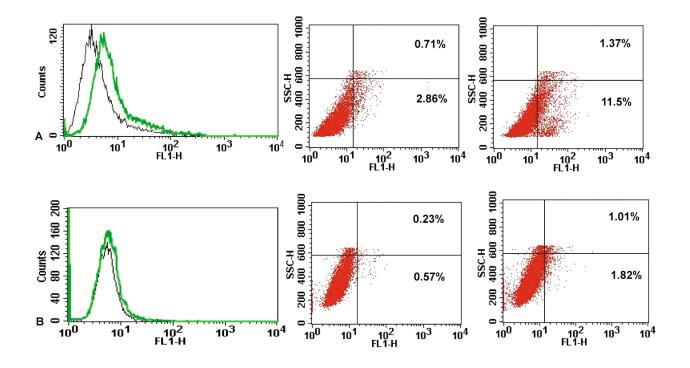


Fig. S8 Uptake of FITC-Dextran encapsulated hydrogel by HeLa cells (A) in 1 h and (B) 6 h.