Supplementary Information

Silver nanoparticle loaded PLGA composite nanoparticles for improving therapeutic efficacy of recombinant IFNγ by targeting cell surface

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Results and Discussion

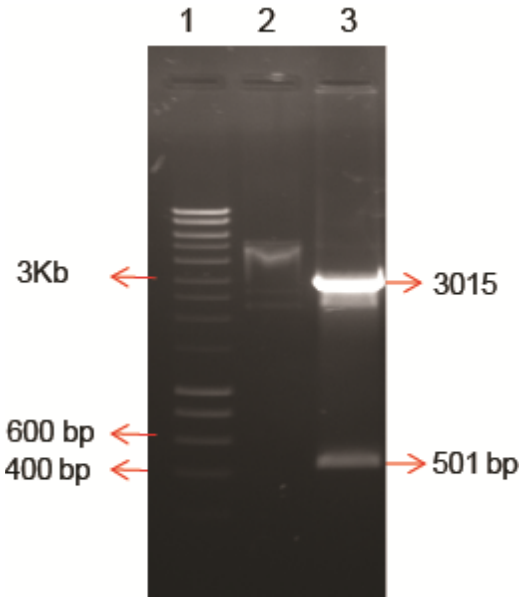

Figure S1 Cloning of IFNγ in pGEMT Easy bacterial cloning vector. Lane1: Uncut plasmid, Lane2: Hyper ladder, Lane 3: pGEMT- IFNγ digested with Eco RI.

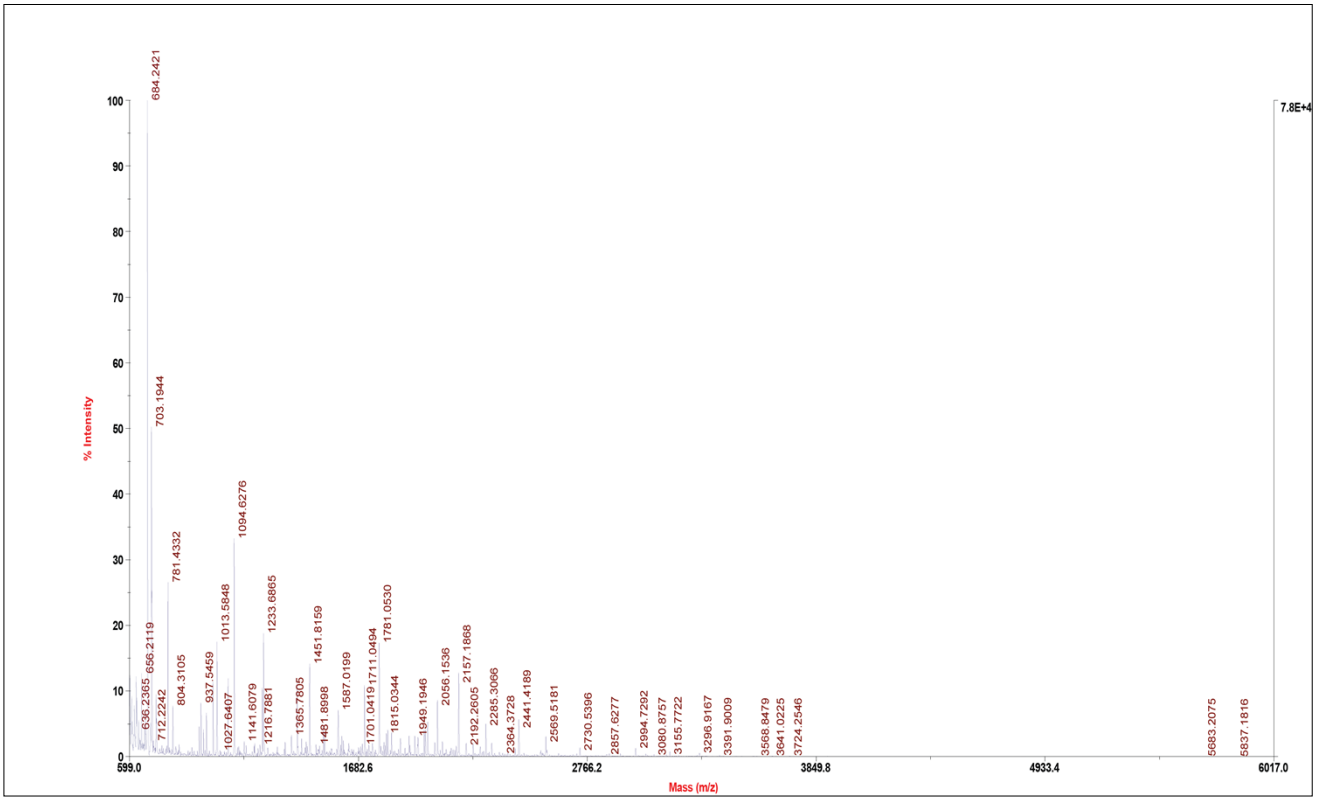

Figure S2 MALDI TOF spectra of trypsin digested GST IFNγ protein.

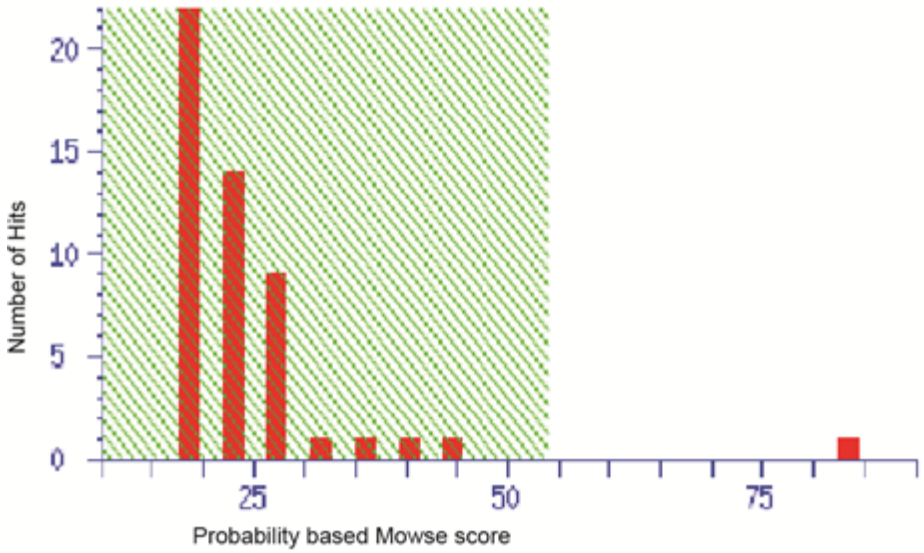

Figure S3 Mascot cgi score graph of GST IFNγ protein.

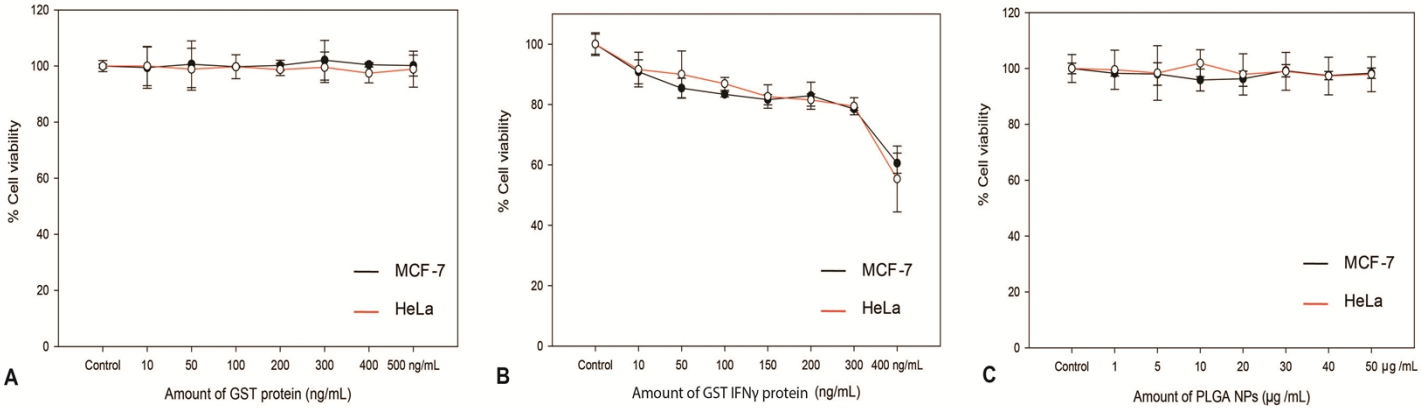

Figure S4 MTT assay showing effect of **A.** GST protein on HeLa and MCF-7 cells **B.** GST IFNγ protein on HeLa and MCF-7 cells **C.** PLGA NPs on HeLa and MCF-7 cells.

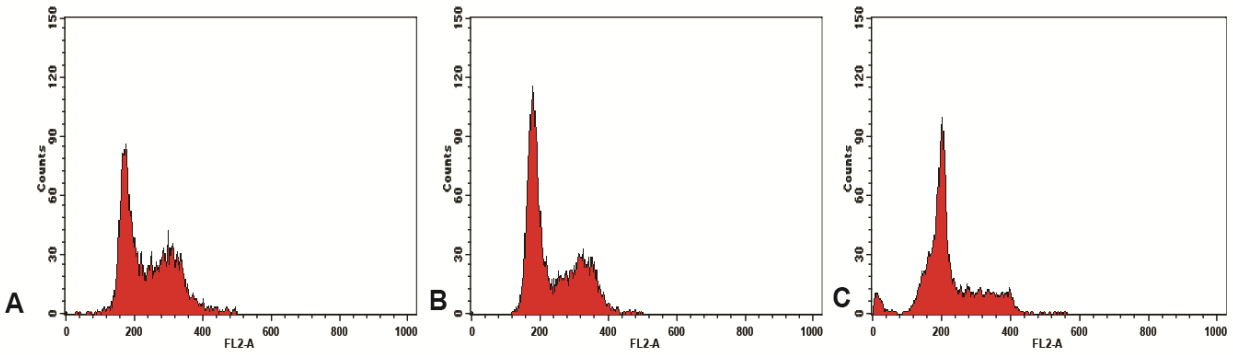

Figure S5 Cell cycle analysis of HeLa cells **(A)** untreated **(B)** GST IFNγ treated **(C)** Ag PLGA composite NPs treated cells.

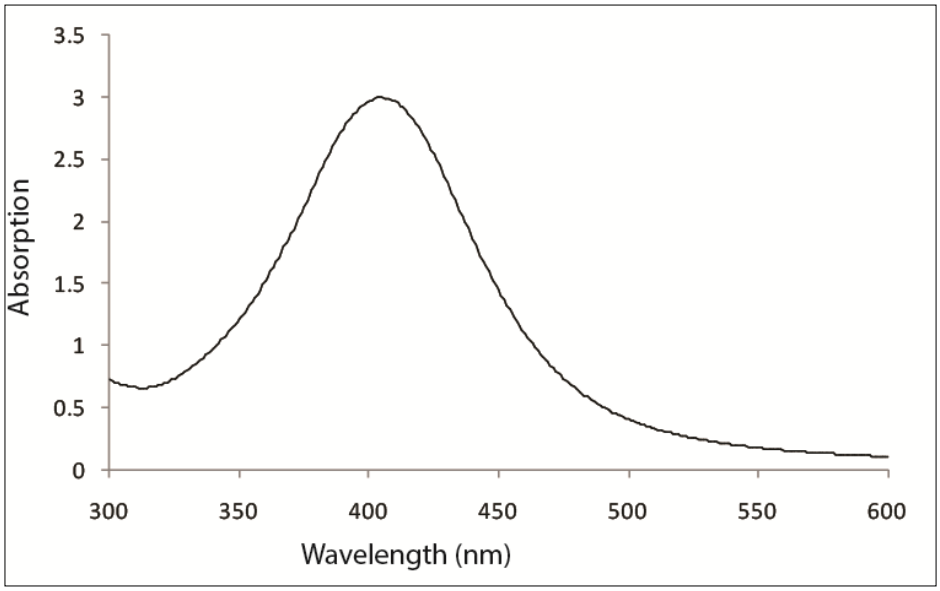

Figure S6 UV-Vis spectra of the Ag NPs.

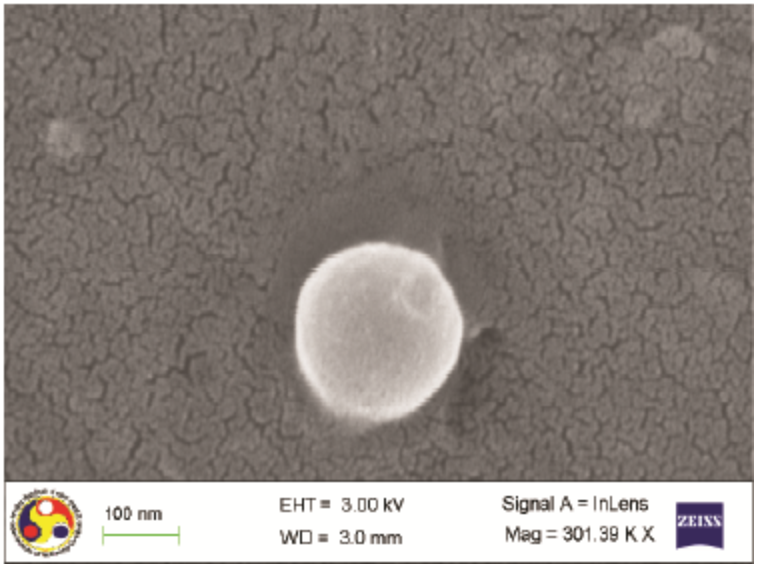

Figure S7 FESEM analysis of Ag PLGA NPs.

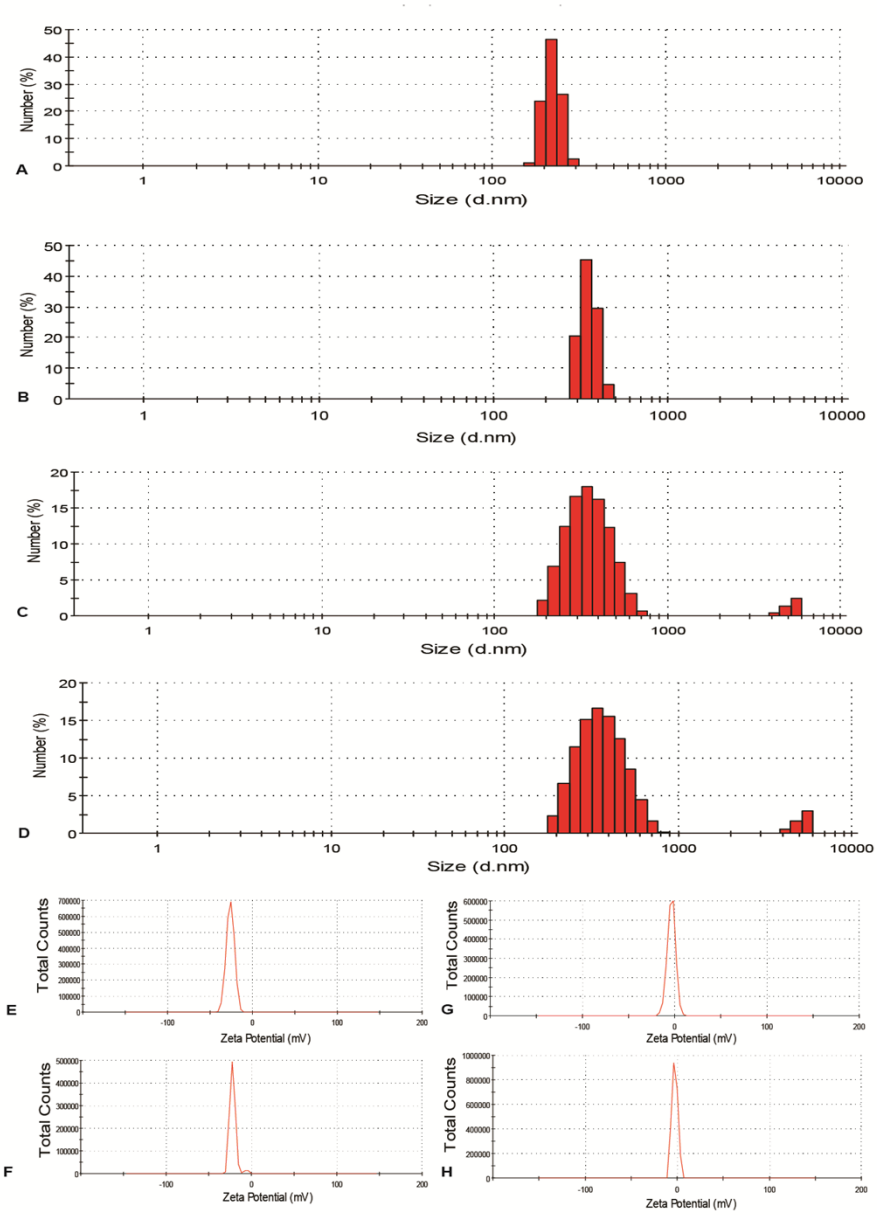

Figure S8 Hydrodynamic diameter study of (A) PLGA NPs (B) PLGA NPs with IFNγ (C) Ag PLGA NPs only (D) Ag PLGA with IFNγ. (E) and (F) showing zeta potential of Ag PLGA nanocomposite and PLGA particles respectively. (G) and (H) are surface charge after GST IFNγ protein incubation with composite Ag PLGA NPs and PLGA NPs.

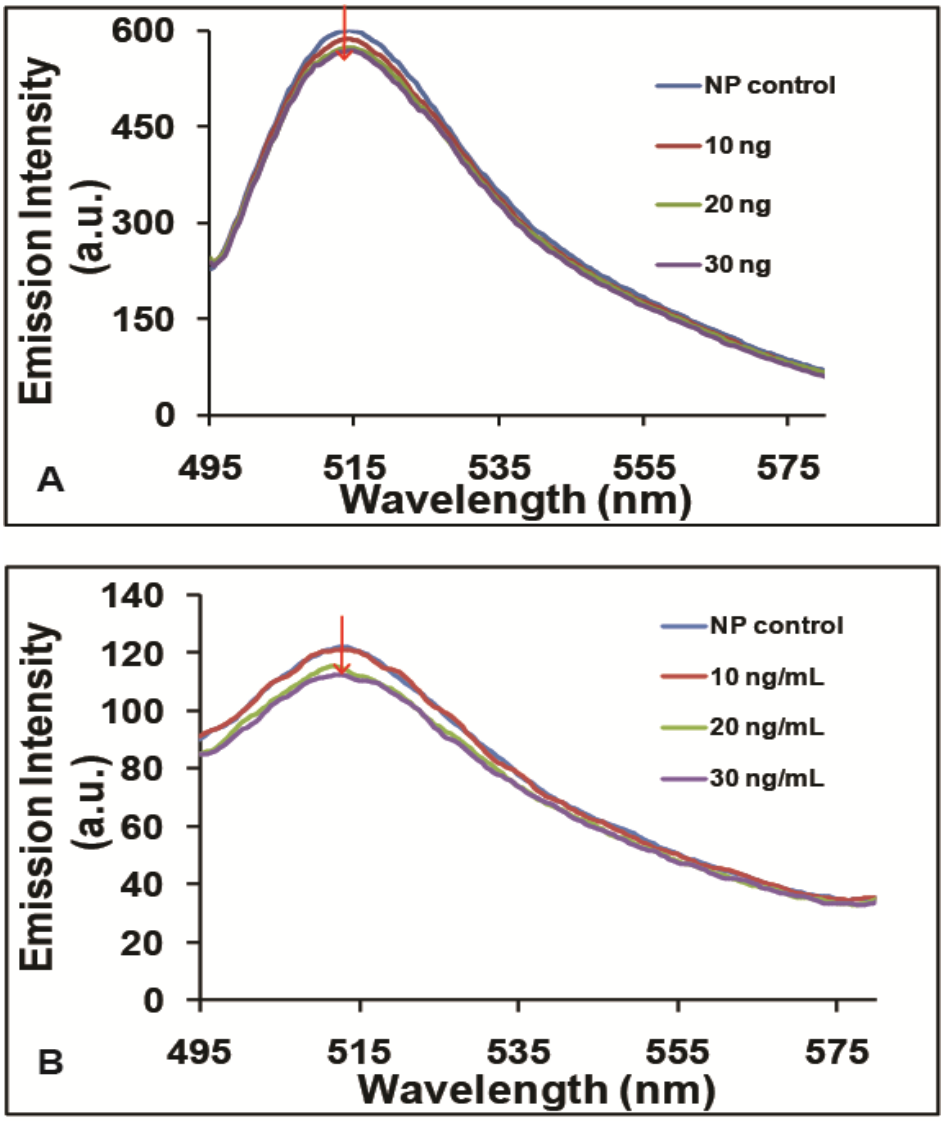

Figure S9 Fluorescence emission study of FITC loaded (A) PLGA NPs (B) Ag PLGA NPs with addition of GST IFNγ protein.

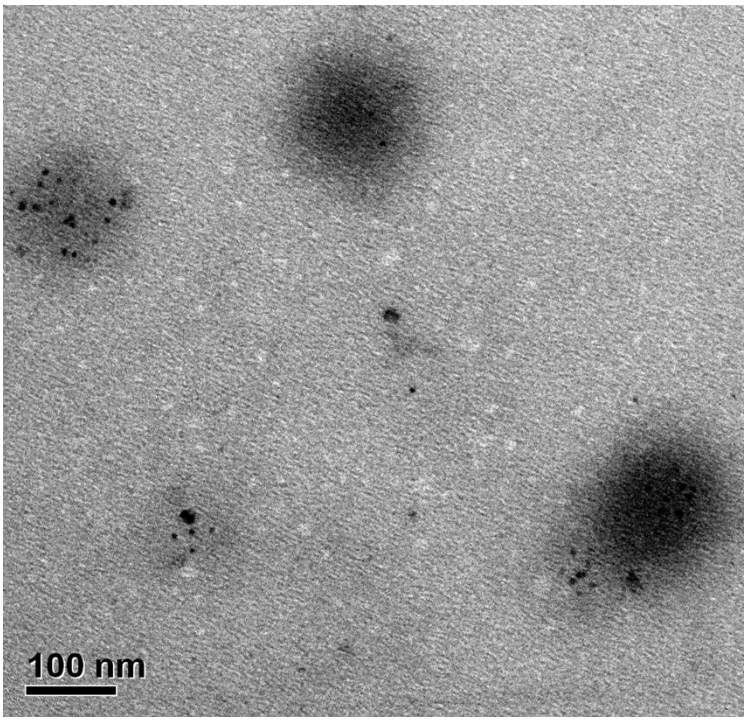

Figure S10 TEM analysis of GST IFNγ incubated Ag PLGA NPs.

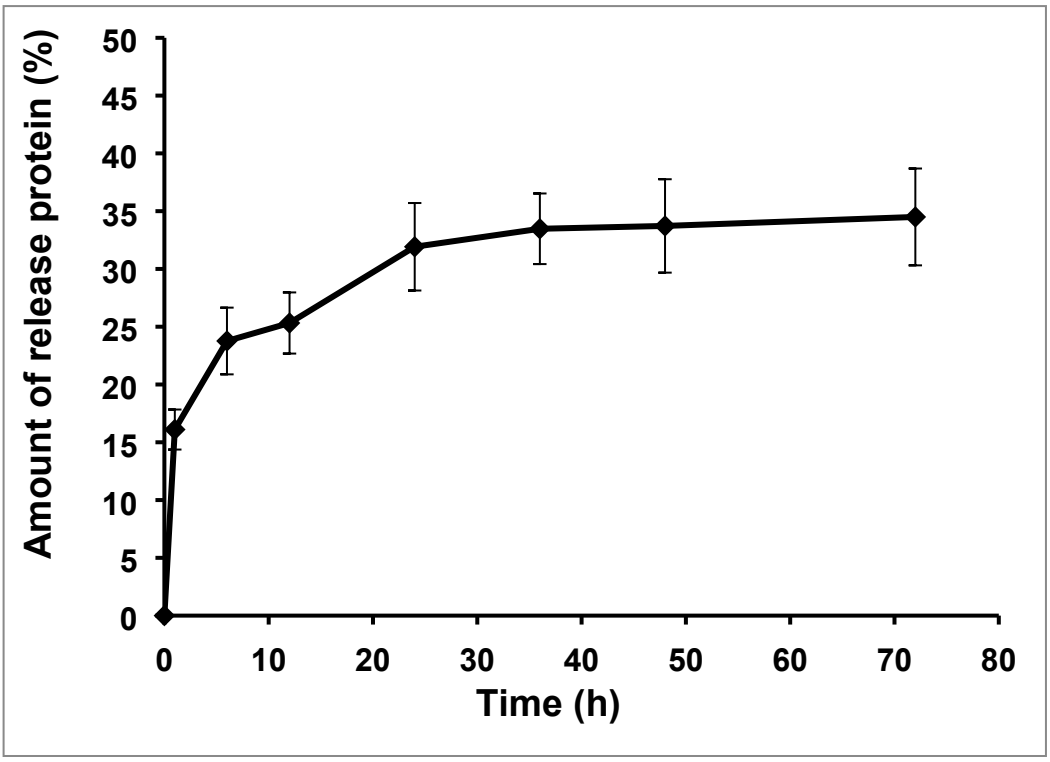

Figure S11 GST IFNγ protein release profile from Ag PLGA NPs.

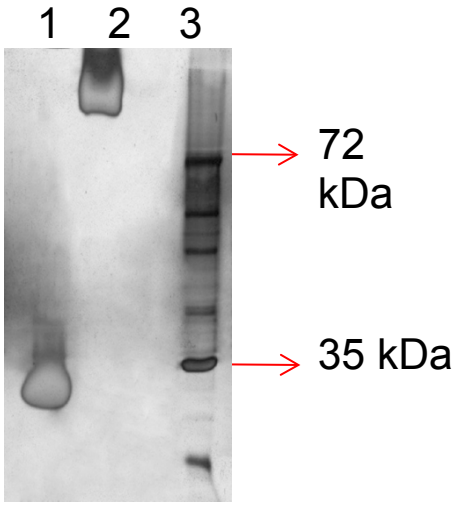

Figure S12 SDS PAGE analysis for protease protection assay. Lane 1: GST IFNγ protein digested with protease, Lane 2: GST IFNγ- Ag PLGA NPs nanocomposite digested with protease, Lane 3: Nanocomposite only, Lane 4: Protein Marker