SUPPORTING INFORMATION



Figure S1. Gel Electrophoresis and Zeta Potential

a) 1% agarose gel at 120 V for 4 h in TAE (tris acetate EDTA) buffer. From left to right: 1) AuNPs-Pc 4, 2) EGF_{pep}-AuNPs-Pc 4, 3) Tf_{pep}-AuNPs-Pc 4, 4) (EGF_{pep}+Tf_{pep})-AuNPs-Pc 4; b) Zeta potentials were measured using a ZetaPals particle analyzer (Brookhaven Instruments, NY)



Figure S2. EGFR and TfR overexpression in glioma cells

a) Western blot of EGFR and TfR overexpression in glioma cell lines, U87 and LN229, b) U87 and LN229 cells were immunostained with either anti-EGFR or anti-TfR. Epi-fluorescence images show nuclei (blue, DAPI) and receptors (green, EGFR, 488 nm, orange, TfR, 594 nm). Images acquired at 40X magnification.



Figure S3. Activation of Pc 4 delivered via untargeted, single targeted or dual targeted AuNPs in glioma cells

U87 cells were treated with increasing concentrations targeted AuNPs-Pc 4 versus standard of care free Pc 4 or untargeted AuNPs for 4 hours and either unactivated (dark) or activated (light) by light (670 nm, $0.83 \text{ J cm}^{-2} \text{ s}^{-1}$). Cell viability was measured using flow cytometry.

Au NPs-Pc 4



Figure S4. Biodistribution of Pc 4 after intravenous injection of untargeted and targeted AuNPs

Mice injected intravenously with either AuNPs-Pc 4 or $(EGF_{pep}+Tf_{pep})$ -AuNPs-Pc 4 were examined for Pc 4 fluorescence after 24 hours of circulation. The organs were excised from the animals and fluorescence acquired using in vivo fluorescence imaging.