## **Supporting Information**

## Low molecular weight chitosan-coated polymeric nanoparticles for sustained and pH-sensitive delivery of paclitaxel

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Figure S1. MALDI-TOF/TOF spectrum of LMWC.



**Figure S2.** pH dependent change in the transmittance of 0.5 mg/mL aqueous solutions of LMWC (n=2) and parent chitosan, measured at 500 nm.



**Figure S3.** Particle size and surface charge of fluorescently-labeled particles. (a) Average diameter ( $Z_{avg}$ ) and polydispersity index of \*NPs; (b) Zeta potential of \*NPs at pH 7.4 and 6.2; (c) Zeta potential of \*MPs at pH 7.4 and 6.2.



**Figure S4.** Transmission electron microscopy (TEM) images of NPs negatively stained with 2% uranyl acetate. Scale bar: 100 nm.



**Figure S5.** Zeta potential of PLGA-pD-LMWC and PLGA-pD-PEG NPs before and after hard corona adsorption. NPs were incubated in PBS ("with PBS") or 50% FBS in PBS ("with FBS") for 1 hour. After incubation, NPs were washed three times with water and dispersed in pH 6.2 or 7.4 buffer for zeta potential measurement. Data are expressed as averages and standard deviations of 3 independently and identically prepared NP samples.



**Figure S6.** Time-lapse confocal imaging of \*PLGA-pD-LMWC NPs incubated with SKOV-3 cells at pH 6.2 for 270 minutes. (Green: \*NPs)