Supporting Information:

γ-PARCEL: Control of Molecular Release Using γ-Rays.

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Figure S1 ^{1}H-NMR spectrum, integrated value of the nanoparticles

The γ-ray-responsive nanoparticles by combining 16 mM PEG-SS-Ac (50 μL), PEG-Ac (150 μL), water (50 μL), 0.1 M APS (50 μL), and 0.1 M TEMED (50 μL) in that order at room temperature and subsequently vortexing the mixture for 20 min to obtain a dispersion of nanoparticles. The ^{1}H NMR spectrum of the nanoparticle to calculate binding rate.

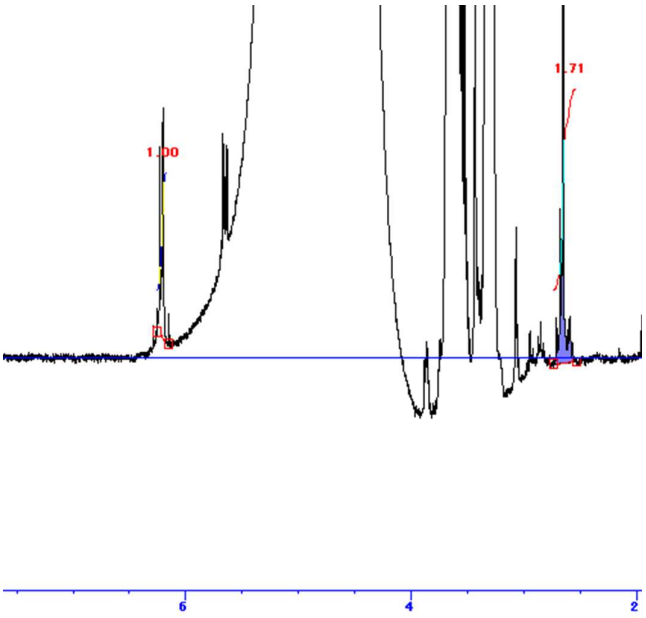

Figure S2 Attenuation rate of γ-ray muscle tissue from swine

γ-Ray attenuation rate was measured 3 minutes, to get average dose,
Blue: background, Red: without tissue, Yellow: with tissue.

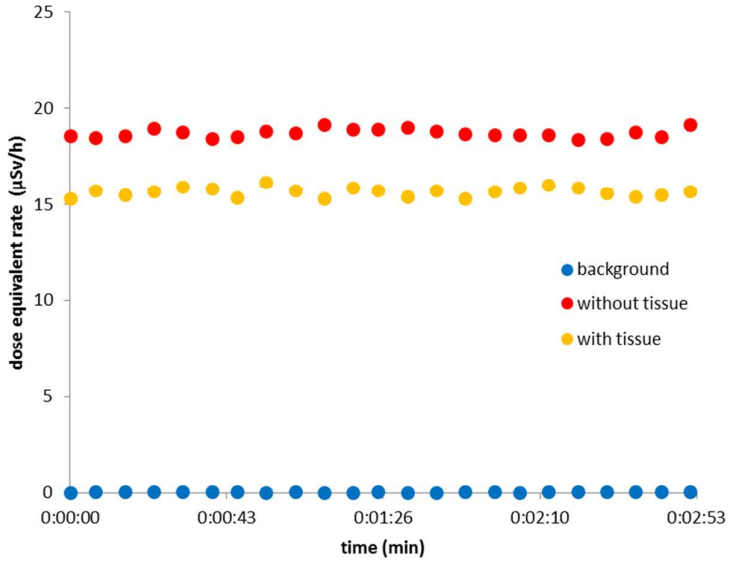

Figure. S3 Calibration curve of the absorbance of Nile blue

Nile blue (concentration 0.1, 0.05, 0.01, 0.005, 0 mg/mL) was poured into a 96-well plate. Then, the absorbance signal (638 nm) was measured with a multiplate reader.