Electronic Supporting Information

Synthesis of amine-polyglycidol functionalised Fe_3O_4@SiO_2 nanocomposites for magnetic hyperthermia, pH-responsive drug delivery, and bioimaging applications

Madhappan Santha Moorthy[a], Yunok Oh[a], Subramanian Bharathiraja[a], Panchanathan Manivasagan[a], Thenmozhi Rajarathinam[b], Bian Jang[b], Thi Tuong Vy Phan[b], Hyukjin Jang[c] and Junghwan Oh[a,b,*]

[a]Marine-Integrated Bionics Research Center, Pukyong National University, Busan 608-737, Republic of Korea

[b]Department of Biomedical Engineering and Center for Marine-Integrated Biotechnology (BK21 Plus), Pukyong National University, Busan 608-737, Republic of Korea

[c]206 South Martin Jischke Drive, West Lafayette, Indiana 47907, United States

*Email: jungoh@pknu.ac.kr

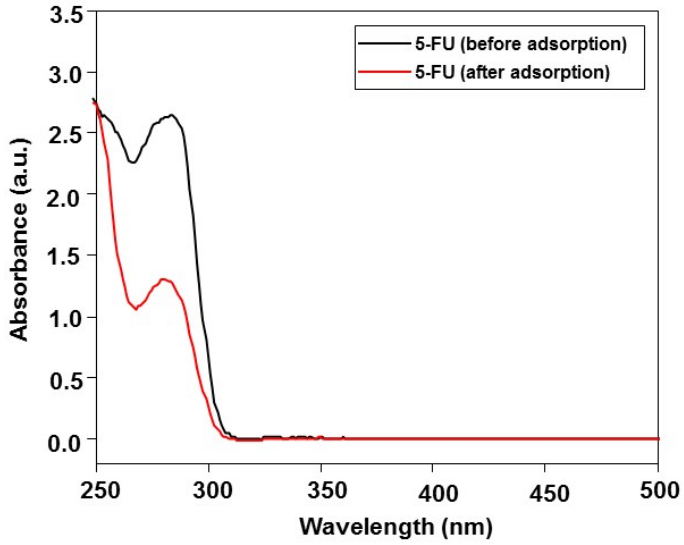

Fig. S1 UV-vis absorption profiles of 5-FU loading into Fe_3O_4@SiO_2@APG-F nanocomposites.

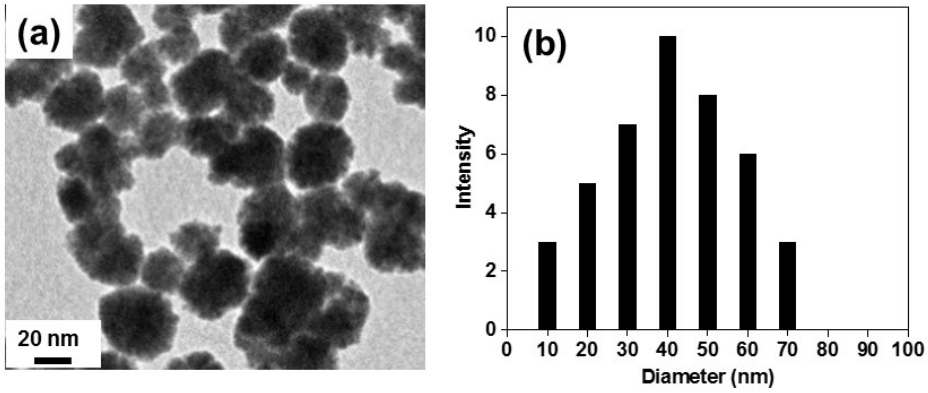

Fig. S2 TEM image (a) and its corresponding particle size distribution (b) of the bare Fe_3O_4 nanoparticles.

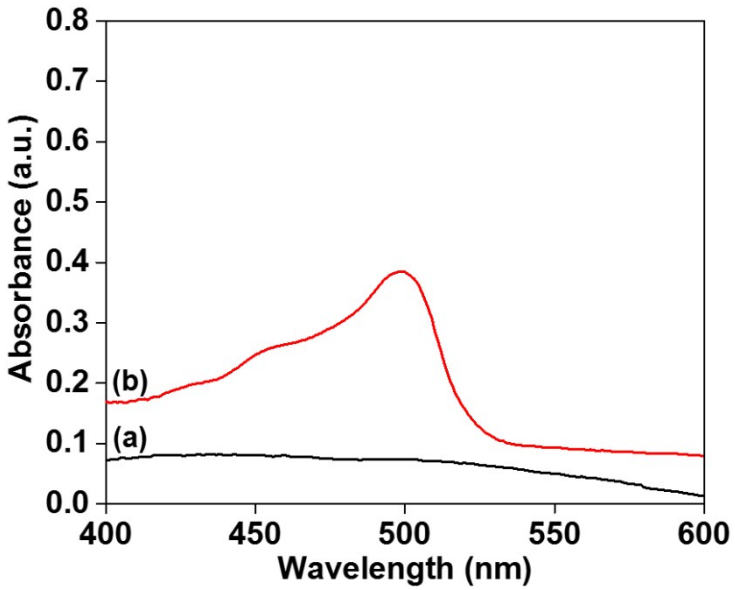

Fig. S3. UV-vis spectra of (a) pristine Fe_3O_4 NP and (b) FITC conjugated Fe_3O_4@SiO_2@APG-F nanocomposites.

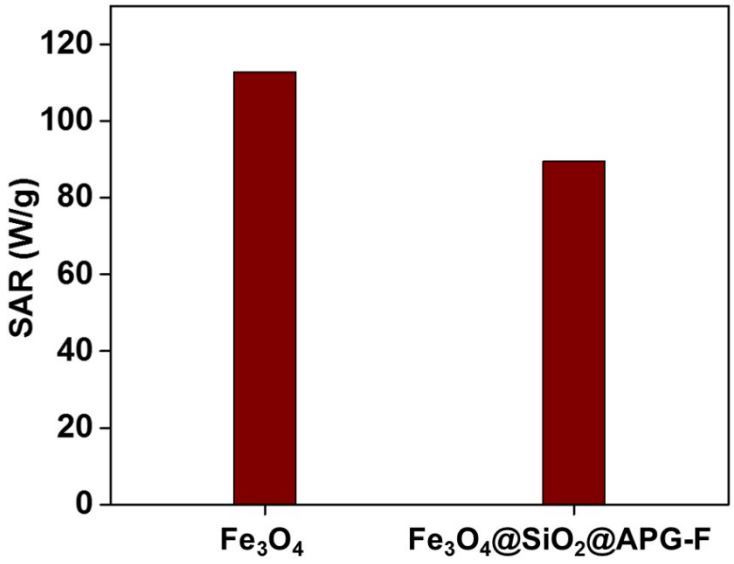

Fig. S4 The SAR values of pristine Fe_3O_4 nanoparticles and FITC conjugated Fe_3O_4@SiO_2@APG-F nanocomposites under magnetic field frequency f = 409 kHz and applied magnetic field H = 180 Gauss.