Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B

Supporting Information for:

Graphene oxide-coumarin derivatives conjugate as activatable nanoprobe for intracellular imaging with one or two photon excitation

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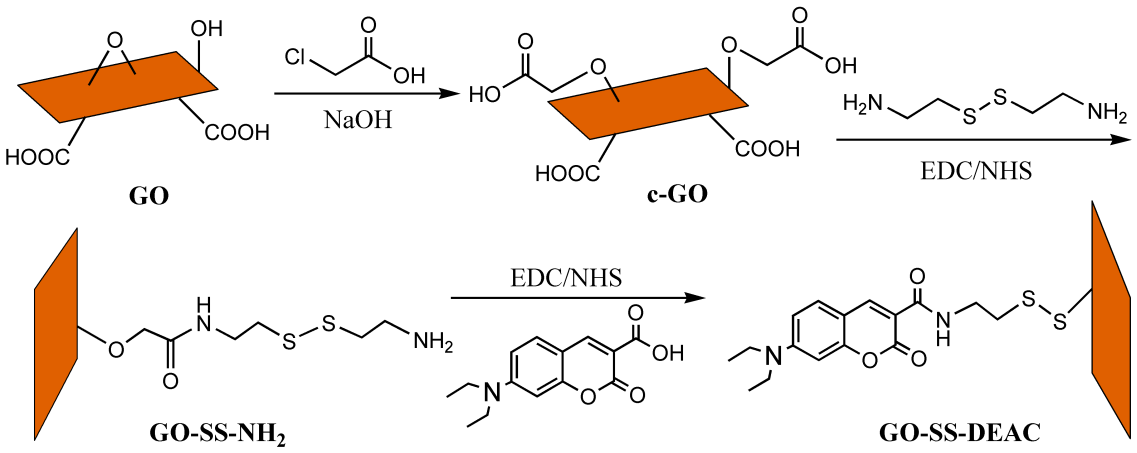


Scheme S1. Schematic representation of the synthesis route of GO-SS-DEAC.

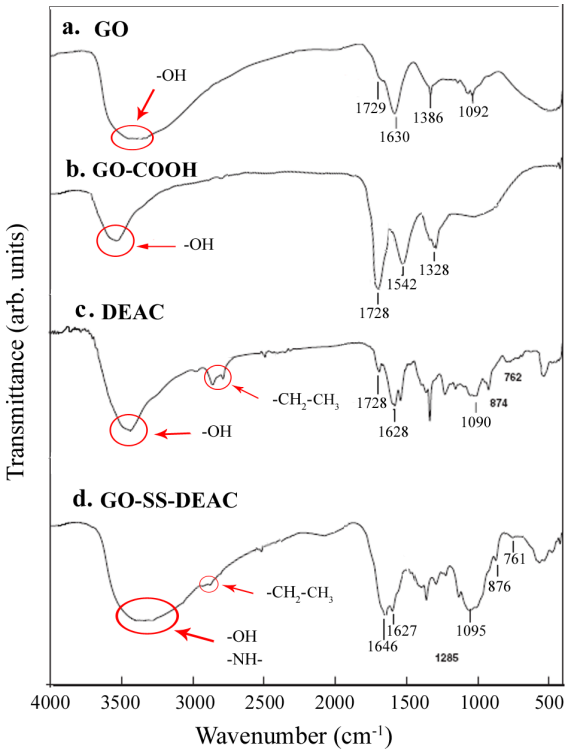


Figure S1. FT-IR spectra of (a) GO, (b) GO-COOH, (c) DEAC, and (d) GO-SS-DEAC.

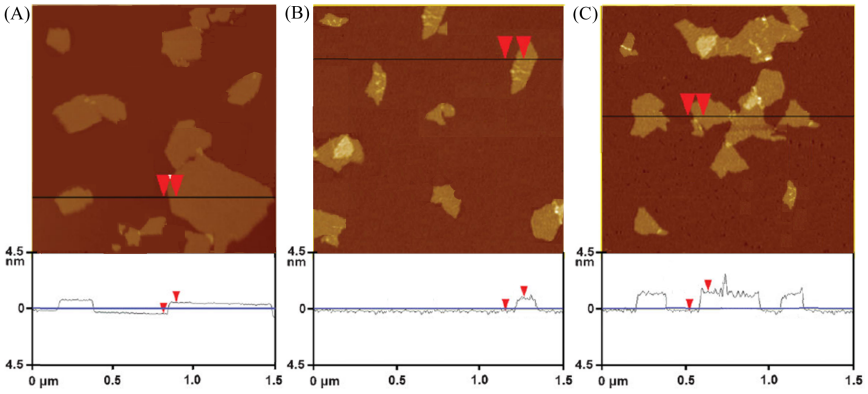


Figure S2. AFM images of as-prepared GO (A), cGO (B), and GO-SS-DEAC (C).

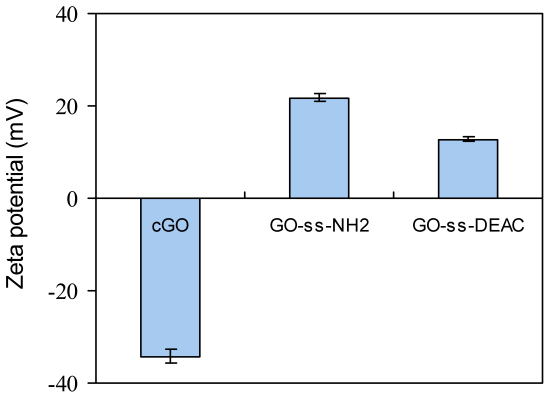
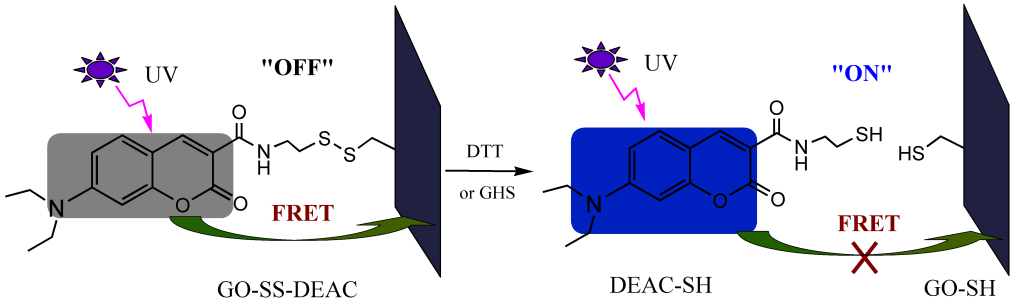


Figure S3. Zeta potential histogram of cGO, GO-ss-NH_2 and GO-ss-DEAC. Error bars were based on triplicated measurements. Data are represented as mean ± SD (n = 3).



Scheme S2. Schematic representation fluorescence "off-to-on" mechanism of GO-SS-DEAC nanoprobe.

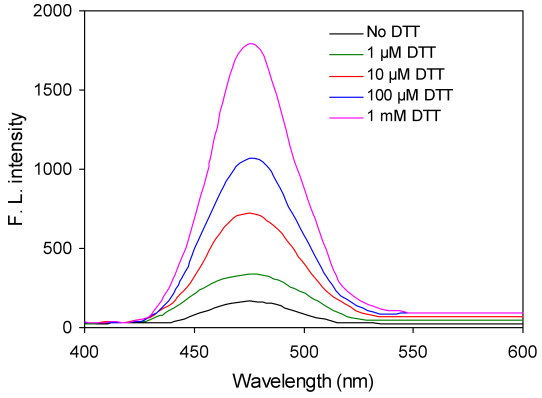


Figure S4. FL spectra of GO-SS-DEAC upon incubation with different concentrations of DTT.

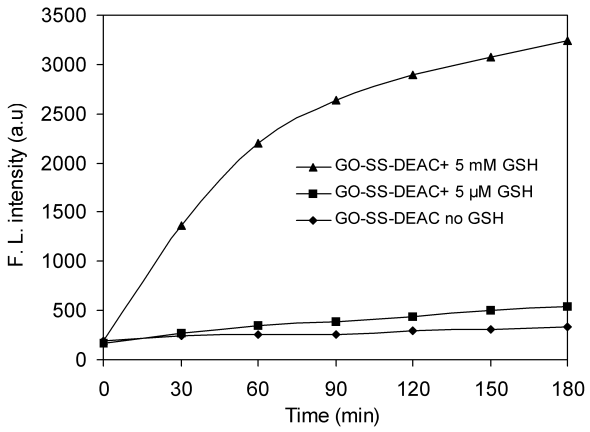


Figure S5. Time-dependent reduction of the activatable GO-SS-DEAC probe under different concentration of GSH.

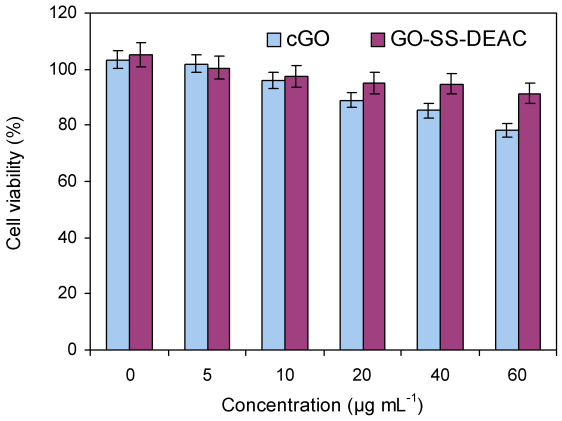


Figure S6. Cellular cytotoxicity of cGO and GO-SS-DEAC to HeLa cells. HeLa cells were incubated with different concentrations of graphene derivatives for 24 h. Data are represented as mean ± SD (n = 3).

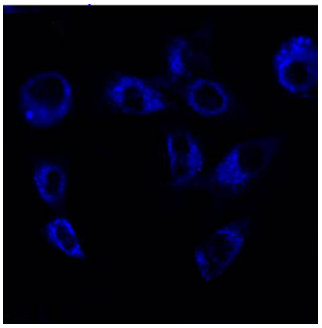


Figure S7. Two-photon fluorescence image of HeLa cells incubated with 20 μg/mL GO-SS-DEAC for 3 h at 37 ℃(λ_{ex} = 800 nm).