Electronic Supplementary Material (ESI) for Analyst.

Supporting Information

Sensitive detection of intracellular RNA of human telomerase by using graphene oxide as carrier to deliver the assembly element of hybridization chain reaction

Zhilu Shi, Xiafei Zhang, Rui Cheng, Baoxin Li, and Yan Jin*

Key Laboratory of Applied Surface and Colloid Chemistry, Ministry of Education, Key Laboratory of Analytical Chemistry for Life Science of Shaanxi Province, School of Chemistry and Chemical Engineering, Shaanxi Normal University, Xi'an 710062, China

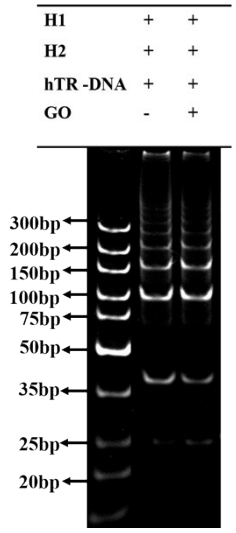

Figure S1. Electrophoresis assay to study the influence of GO on the hTR-triggered hybridization chain reaction.

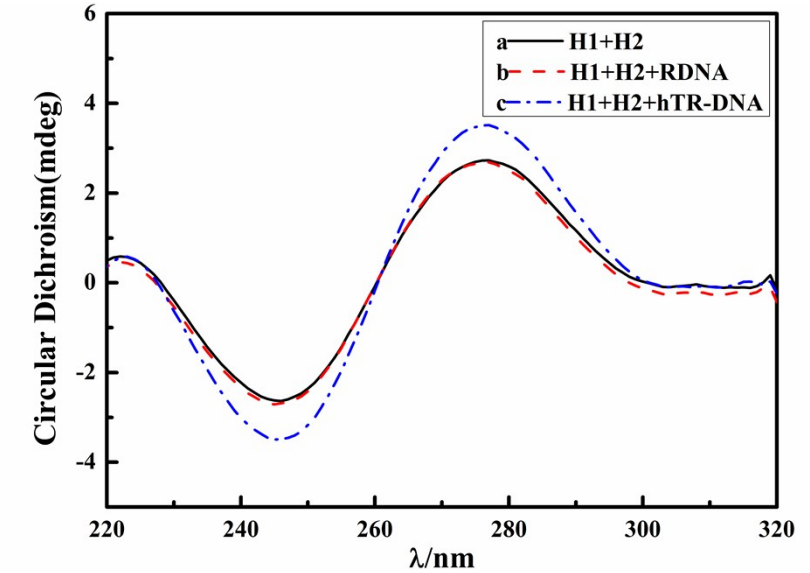

Figure S2. Circular dichroism spectra of H1/H2 under different condition. The concentrations of hTR-DNA, RDNA, H1 and H2 are 400 nM, 400 nM, 2 μM, 2 μM, respectively.

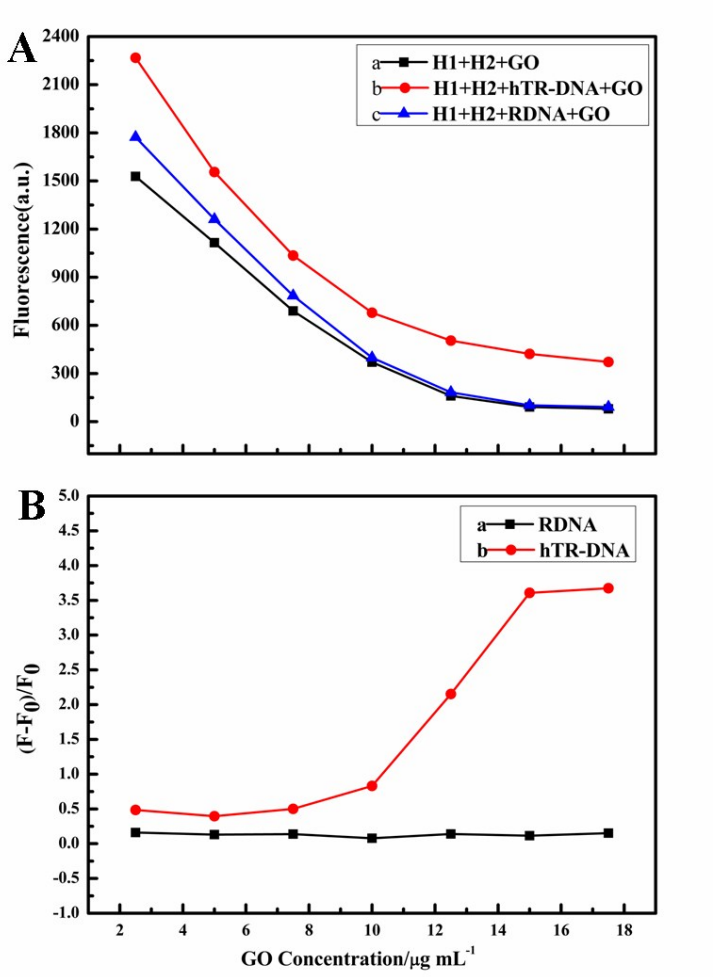

Figure S3. (A) The effect of the concentration of GO on the fluorescence intensity , (B) The effect of the concentration of GO on the fluorescence efficiency. F_0 and F are the fluorescence intensity of H1/H2/GO mixture in the absence and presence of hTR or RDNA, respectively.

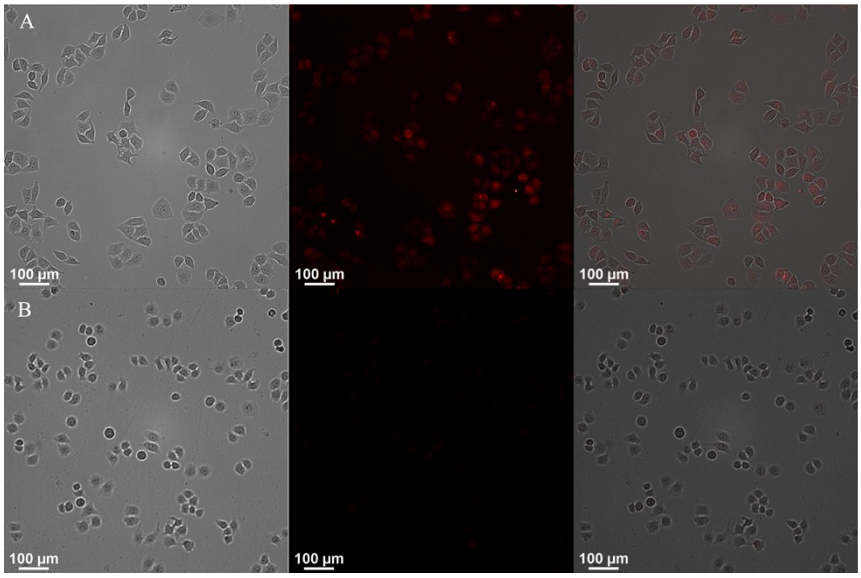

Figure S4. Bright-field image, fluorescence microscopy image and overlap image of Hela, normal cells HL-7702 cultivated with H1/H2/GO 8h, respectively.