Supplementary



Fig s1 Characterization of ssDNA-GNPs constructed at 50 °C. The agarose gel images of ssDNA-GNP samples synthesized at 37 °C and 50 °C (a). The SEM images of ssDNA-GNPs synthesized at 50 °C (b).



Fig s2 (a) The stability of ssDNA-GNPs probes with different lengths of regulatory domains in 0.1 M NaCl solution. (b)The UV-Vis spectra of three specimens.



Fig. s3. After incubated with Dem-p16 (a) and Met-p16 (c), aggregation of the probe 2 in different concentration NaCl solution at room temperature. (b) and (d) are UV-Vis spectrum corresponding to the treated group of Dem-p16 and Met-p16.



Fig s4 The relationship of Met-p16 ratio and A_{620nm}/A_{520nm} , error bars represent mean \pm SD (n=3),*p<0.05, **p<0.01.



Fig s5 (a,c,e) Bisulfite PCR amplification of *E-cadherin, p15* and *p16* sequences in CaCo2, HepG2 and HCT116 cell, (f) Nest PCR amplification, (b,d,g) endonuclease digestion with *Bst*UI.