

## Supporting Information

### **G-Quadruplex-based DNAzyme for colorimetric detection of cocaine:**

### **Using magnetic nanoparticles as separation and amplification element**

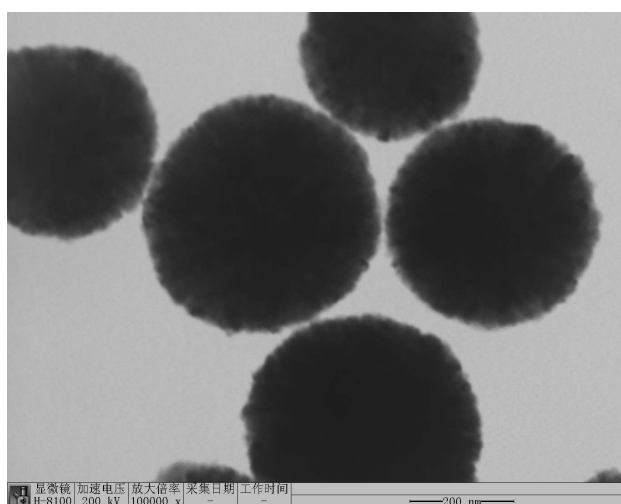
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**Table S1** DNA sequences used.

DNAs used	
C1-AG4	5'-TGGGTAGGGCGGGTTGGGAAATTCGTTCTTCAATGAAGTGGGACGACA-3'
SH-C2	5'-TTTTTGGGAGTCAAGAACGAA-3'



**Figure S1** TEM image of amine-functionalized  $\text{Fe}_3\text{O}_4$  nanoparticles ( $\text{MNPs-NH}_2$ ), which had a relatively smooth surface and an average diameter of about 400 nm. The prepared  $\text{MNPs-NH}_2$  also showed a good monodispersity in water solution.