Supplementary Data

**Development of a lncRNA BC032469-dependent gold nanoparticle molecular beacon for the detection of gastric cancer cells**

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**Figure S1.** **Expression levels of lncRNA-BC032469 in gastric cancer cells**

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**Figure S 2** **Standard curve of the gold solution**



**Figure S3 Fluorescence of cells incubated with** **AuNP–MBs** **for different times and at different concentrations.** The fluorescence intensity (a) and fluorescence intensity statistics (b) of the cells co-incubated with AuNP–MBs for different concentrations; the fluorescence intensity (c) and fluorescence intensity statistics (d) of the cells co-incubated with AuNP–MBs for different times.

**Table S1. Primer sequences.**

|  |  |
| --- | --- |
| LncRNA- BC032469-F | Sense5'- GGACAAGAAAGCTGGGGCCT -3' |
| LncRNA-BC032469-R | Antisense: 5'- TCGCTTCTCTCAGTGCTGGC -3' |
| β-actin | Sense: 5′-TTCCTTCCTGGGCATGGAGTCC-3′ |
|  | Antisense: 5′-TGGCGTACAGGTCTTTGCGG-3′ |

**Table S2. MB and DNA target sequences.**

|  |  |
| --- | --- |
| Oligonucleotides | sequences |
| MB-1 | CY3-CTCGCGGGCTCTAGCTCCAGGGACTGTGGCGAGAAAAAAAAAA-(CH2)6-SH |
| MB-2 | FAM-CAGCGGACTCCCGACGAAGGTGGGTAG CGCTGAAAAAAAAAA-(CH2)6-SH |
| DNA target 1 (perfectly matched) | CTGAGGGCTGCTTCCACCCATC |
| DNA target 2 (single-base mismatched) | CTGAGGTCTGCTTCCACCCATC |

The stem sequence is underlined. The red letter represents the mismatched site.