Supporting Information

## Isothermal amplification detection of miRNA based on catalysis of nucleases and voltammetric characteristics of silver nanoparticles

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**Fig. S1** (a) Transmission electron microscopy (TEM) image of freshly prepared AgNPs. (b) UV-vis spectrum of AgNPs versus pure water as blank composition with the characteristic absorbance peak at the wavelength of 394 nm (10 mm optical path length).



**Fig. S2** Relationship between LSV peak current and the incubation durations of the DNA2 modified electrode in AgNPs solution.

Name	Sequence (from 5' to 3')
DNA1	AAAGTCTCGCTCTCTGCCCCTCATTTTAAATGCTGAGGAA
DNA2	SH-(CH2)6-TTTTTTCCTCAGCATTT-(CH2)6-NH2
miR-423-5p	UGAGGGGCAGAGAGCGAGACUUU
miR-17-5p	CAAAGUGCUUACAGUGCAGGUAG
miR-21	UAGCUUAUCAGACUGAUGUUGA
let-7a	UGAGGUAGUAGGUUGUAUAGUU
mismatched1	UGAGGGGCAG <u>T</u> GAGCGAGACUUU
mismatched2	UGAGGGGCAGAGAGCGA <u>TT</u> CUUU
<sup><math>\alpha</math></sup> The bold sequences are the recognition site for Nt.BbvCI.	

Table S1 DNA and miRNA sequences used in this study.<sup> $\alpha$ </sup>