

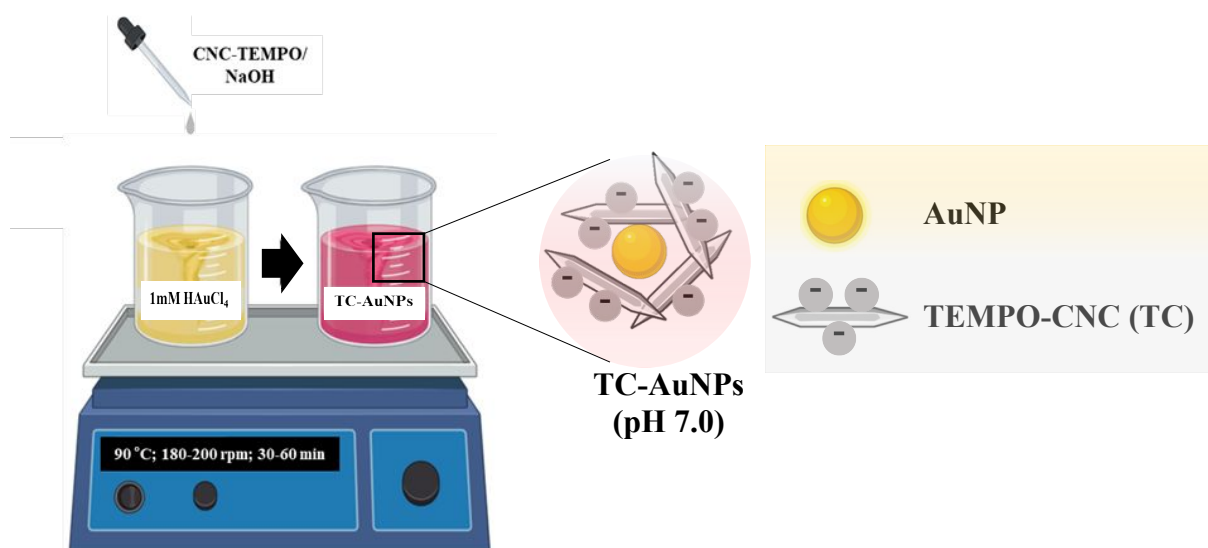
## **Supplementary Information**

### **TEMPO-CNC-capped gold nanoparticles for colorimetric detection of pathogenic DNA**

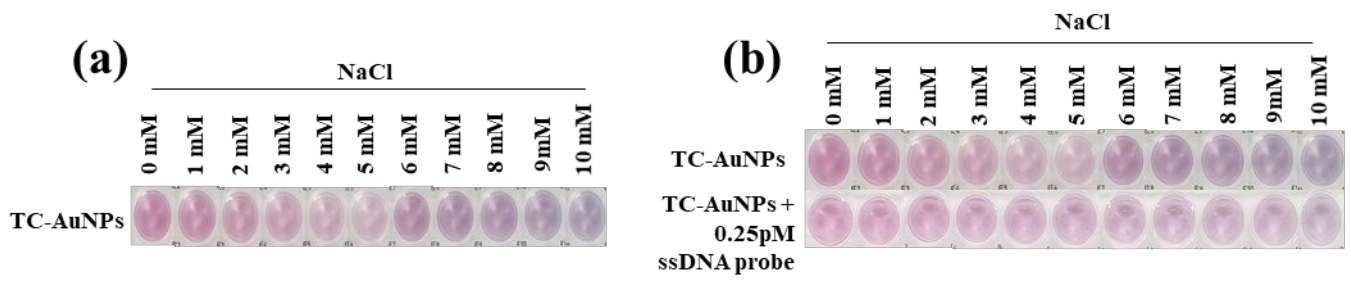
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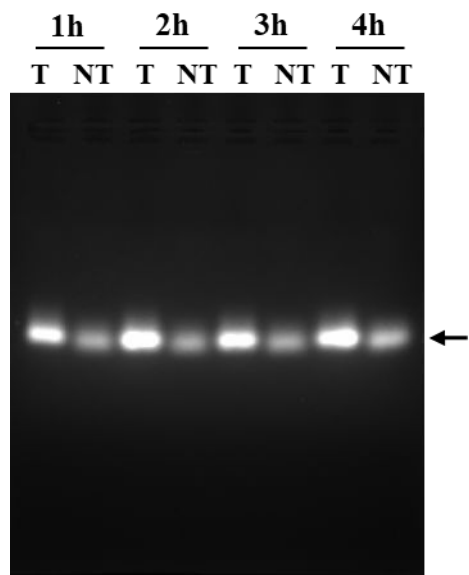
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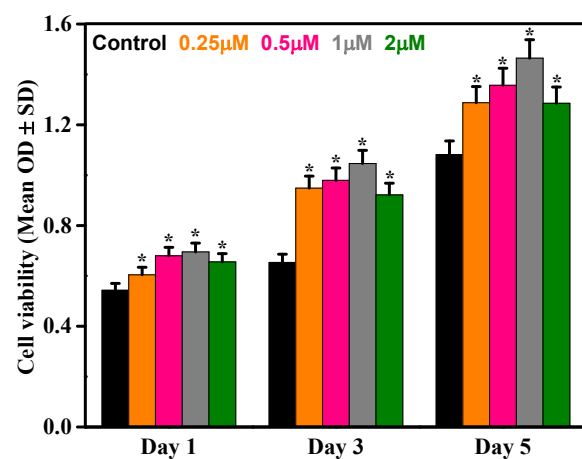
**Figure S1.** Schematic illustration of the synthesis of TC-AuNPs.



**Figure S2.** Aggregation pattern of TC-AuNPs at 0 sec. **(a)** With increasing NaCl concentrations, **(b)** in the presence of 0.25pM ssDNA probe.



**Figure S3.** Agarose gel electrophoresis of hybridized DNA after indicated time intervals.



**Figure S4.** Cytotoxicity evaluation of hBMSCs in the presence of 0.25 μM, 0.5 μM, 1 μM, and 2 μM of TC-AuNPs after indicated time intervals. Data are mean ± SD of triplicated experiments, statistical significance at  $*p < 0.05$ .