

Table S1. Oligonucleotide sequences used in this study

Oligonucleotide	Sequence (from 5' to 3')
AS1411 aptamer	SH-GGTGGTGGTGGTTGTGGTGGTGGTGG
FOXM1 aptamer	TCACTCACACCGCATCTCTACGTCCGGTTGCGCTTTCCTTTTTTACTCCCCAGGT
ATP aptamer	SH-ACCTGGGGGAGTATTGCGGAGGAAGGT-NH ₂

Table S2. Particle size dispersion and zeta potential of synthesized formulations

Formulation	Zeta potential (mv)	PDI	Size (nm)
AuNPs	-25.9	0.247	11.99
AuNPs-AFPA	-10.3	0.559	26.07

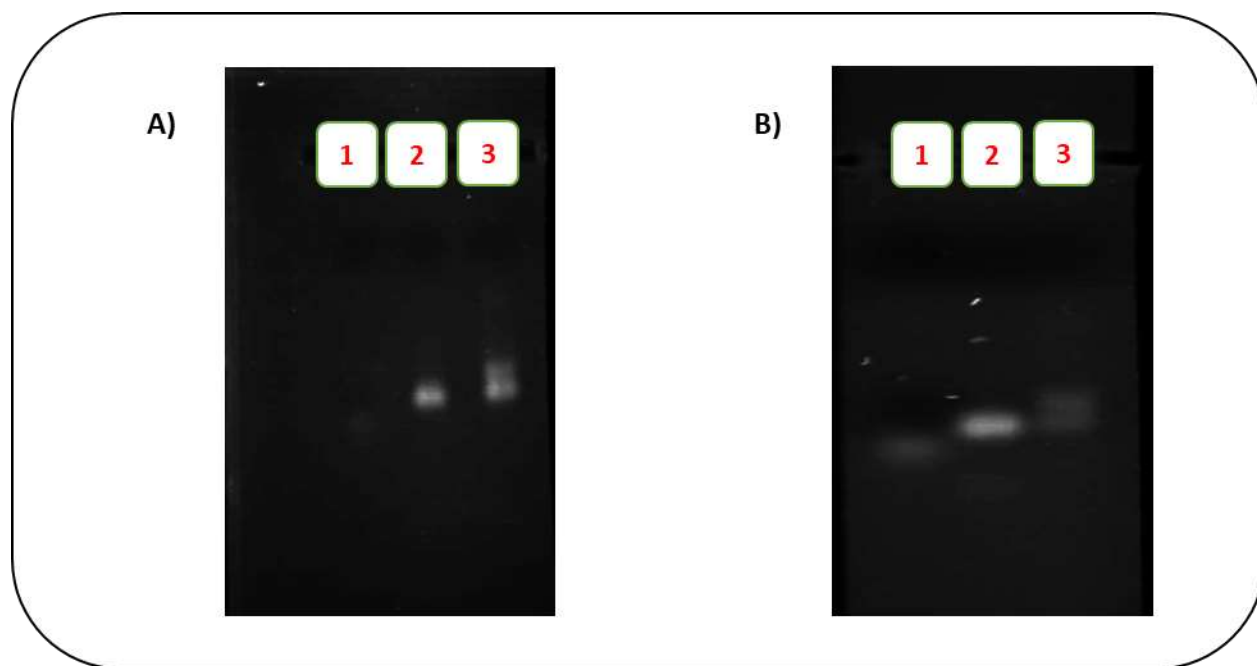


Figure S1. (A) Checking the formation of the FPA by using agarose gel electrophoresis: (1) PA, (2) FOXM1 Apt, (3) FPA (1:1). (B) Checking the formation of the FPA by using agarose gel electrophoresis: (1) PA, (2) FOXM1 Apt, (3) FPA (1:2).

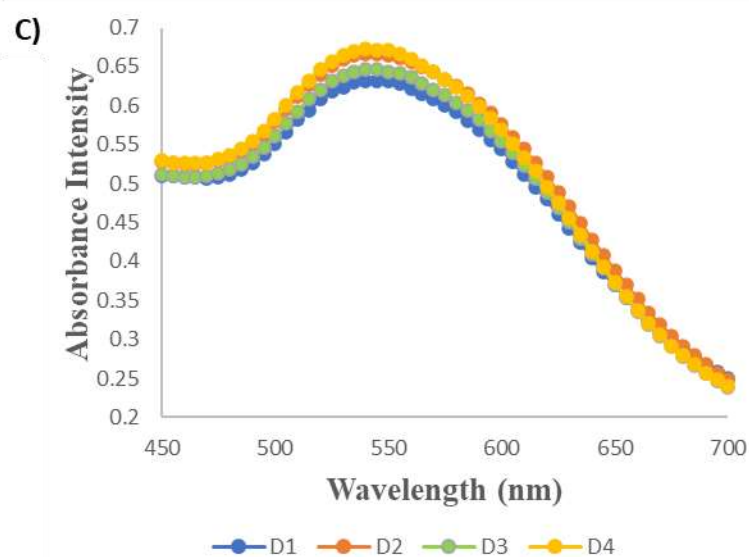
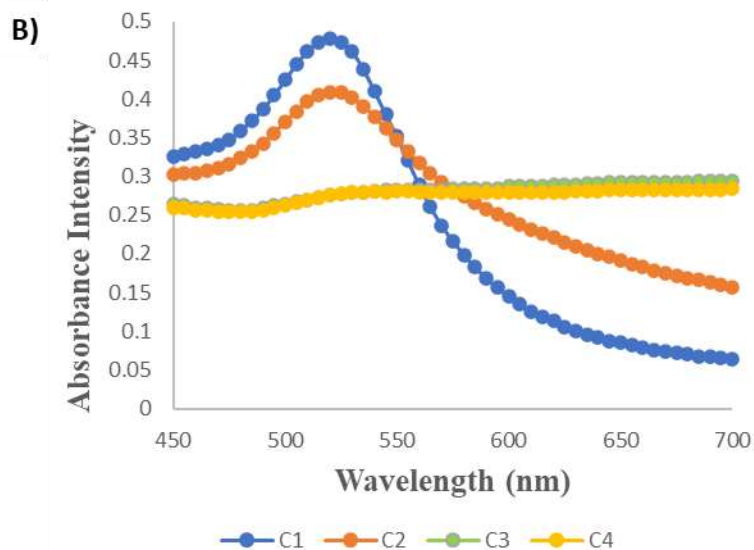
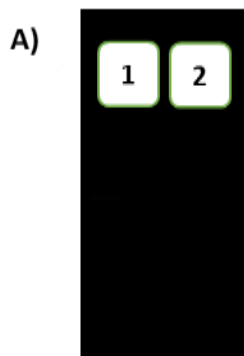


Figure S2. (A) Serum stability test results of AuNPs-AFPA using agarose gel electrophoresis: (1) AuNPs-AFPA after stability test and (2) AuNPs-AFPA. (B) Results of stability analysis of AuNPs by aggregation with adding salt: (C1) Absorption of AuNPs without addition of salt, (C2) after addition of 3 μL salt stock, (C3) after addition of 6 μL salt stock, (C4) after addition of 10 μL salt stock. (C) Results of stability analysis of AuNPs-AFPA by aggregation with adding salt: (D1) Absorption of AuNPs without addition of salt, (D2) after addition of 3 μL salt stock, (D3) after addition of 6 μL salt stock, (D4) after addition of 10 μL salt stock.