

Supplementary Material

A Novel Fluorescent Aptasensor for Sensitive Detection of Oxytetracycline Based on Gold Nanoparticles and OTC-Eu³⁺ Complex Using Two Different Methods for Modification of Gold Nanoparticles

Hamideh Sharifi Noghabi,^A Khalil Abnous,^{B,C,F} Seyed Mohammad Taghdisi,^{D,E,F} and Mahmoud Chamsaz^{A,F}

^ADepartment of Chemistry, Faculty of Sciences, Ferdowsi University of Mashhad, Mashhad 9177948974, Iran.

^BPharmaceutical Research Center, Pharmaceutical Technology Institute, Mashhad University of Medical Sciences, Mashhad 9177948954, Iran.

^CDepartment of Medicinal Chemistry, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad 9177948954, Iran.

^DTargeted Drug Delivery Research Center, Pharmaceutical Technology Institute, Mashhad University of Medical Sciences, Mashhad 9177948954, Iran.

^EDepartment of Pharmaceutical Biotechnology, School of Pharmacy, Mashhad University of Medical Sciences, Mashhad 9177948954, Iran.

^FCorresponding authors. Email: abnouskh@mums.ac.ir; taghdisihm@mums.ac.ir; mchamsaz@gmail.com

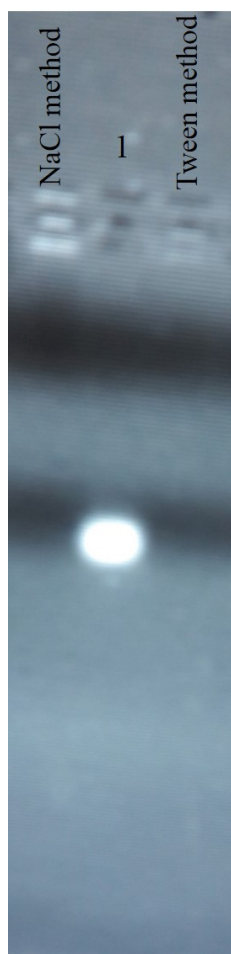


Figure S1. Agarose gel electrophoresis.

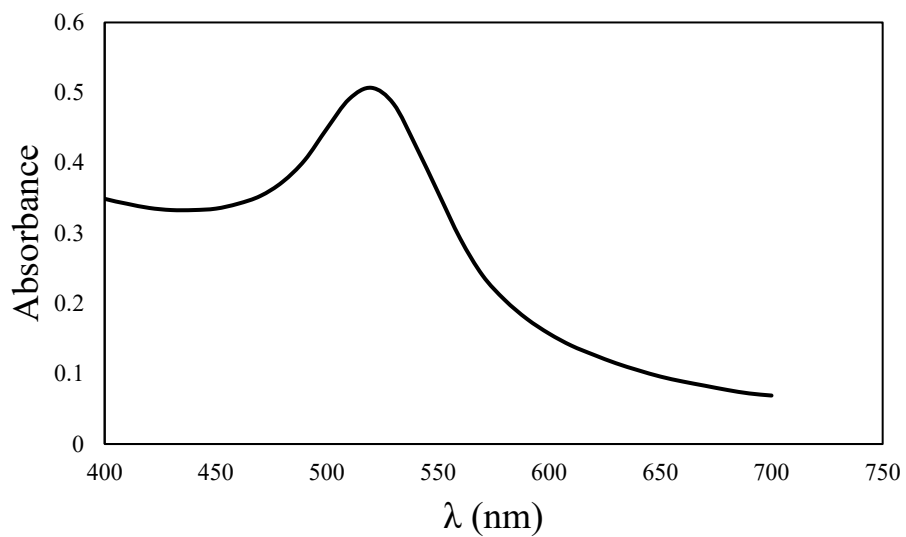


Fig S2a.

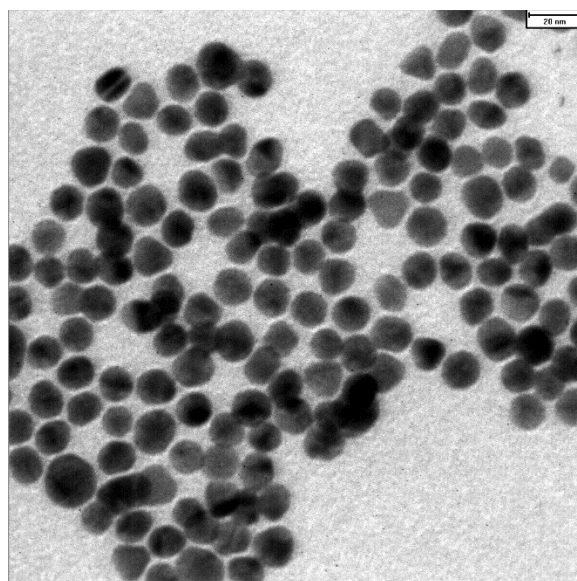


Fig S2b.

Figure S2. (a) Visible spectrum of AuNPs (b). The TEM image of AuNPs

Table S1. Oxytetracycline aptamer sequence applied in this work.

Aptamer	Sequence (from 5' to 3')	Modification	Purification
Oxytetracycline	CGA CGC ACA GTC GCT GGT GCG TAC CTG GTT GCC GTT GTG T	-Thiol-3'	HPLC