

Support Information

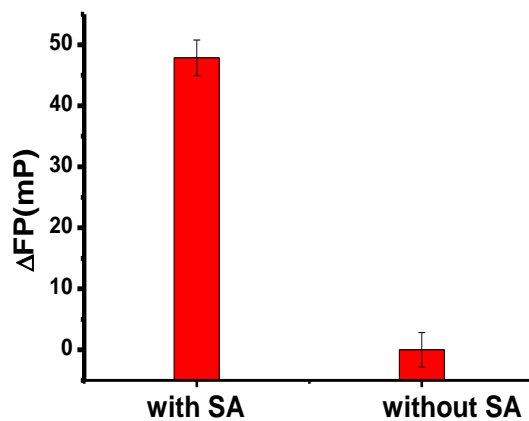


Fig. S1. FP changes without and with SA protein. The concentration of target is 500nM

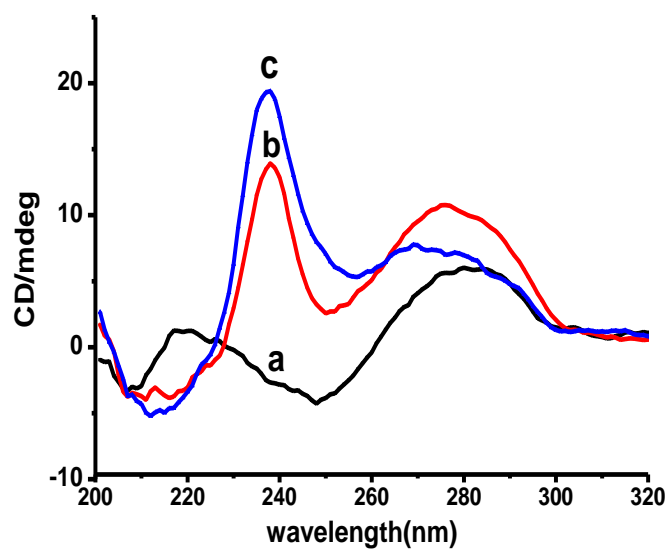


Fig. S2 CD spectra of 1 μM Apt-DNA (a); 1 μM Apt-DNA with 2 μM SA incubated at 37°C for 1h (b); 2 μM SA (c)

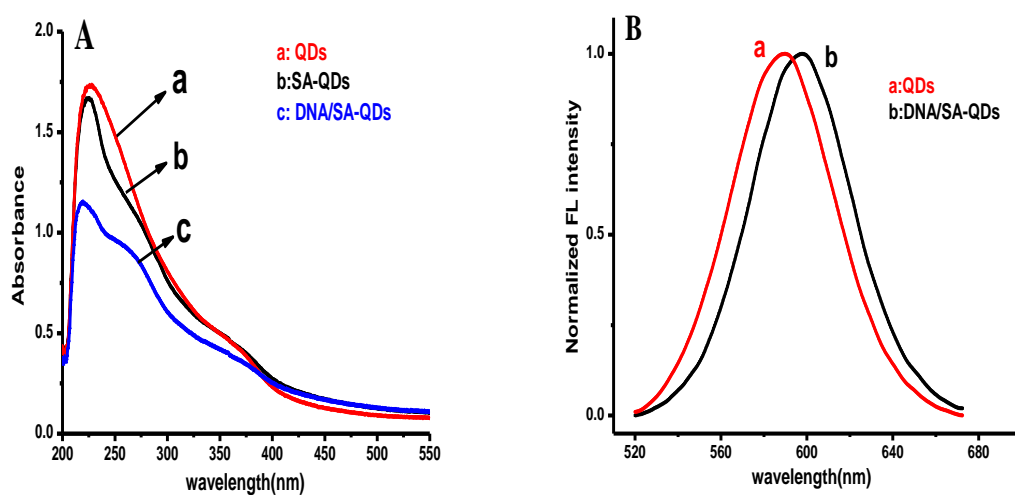


Fig. S3 The spectra of QDs and QDs modified by DNA. (A) UV-vis absorption spectra of QDs (a); SA-QDs (b); DNA/SA-QDs (c); (B) Normalized FL emission spectra of QDs labeled before (a) and after (b)

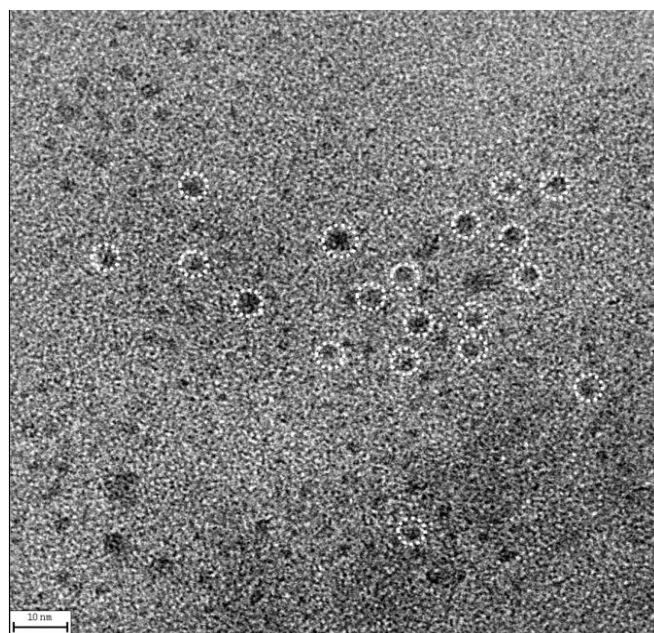


Fig. S4 The HRTEM image of synthesised QDs.

Table S1 Synthesized oligonucleotides in the experiment

Name	Sequences(5`-3`)
Biotin-DNA	Biotin-(<i>T</i>) ₁₀ TACGGTGATGA
Apt-DNA	ACACAAATCCT <i>ATTGACCGCTGTGTGACGCAACTCAAT</i>
Apt-DNA-6T	ACACAAATCCT (T) ₆ <i>ATTGACCGCTGTGTGACGCAACTCAAT</i>
Apt-DNA-12T	ACACAAATCCT (T) ₁₂ <i>ATTGACCGCTGTGTGACGCAACTCAAT</i>
T-DNA	AGGATTTGTGTTTCATCACCGT
M2	AGGAT <u>C</u> TGTGTTCA <u>C</u> CACCGT
M4	AG <u>T</u> AT <u>C</u> TGTGTTCA <u>C</u> CACT <u>G</u> T
M6	AG <u>T</u> AT <u>C</u> T <u>G</u> C <u>G</u> T <u>G</u> CA <u>C</u> CACT <u>G</u> T
CM	<u>CTTCGCGACTCGACCTGTTAC</u>
Block-DNA	<u>TTTTTTCAGAAAGGAC</u>

The bold letters in Apt-DNA indicate the partial sequences complementary to the target. The italic letters in Apt-DNA indicate the SA aptamer. The bold italic letters show the other sequences complementary to the target. The underlined letters represent the mismatched sites. The bold underlined letters show the sequences to blocking the excessive site.