

Supporting Information

Quantum Dot Encoding of Aptamer-Linked Nanostructures for One Pot Simultaneous Detection of Multiple Analytes

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Melting Curves

DNA-linked nanoparticle aggregates should have sharp melting transitions and the melting curves of the aggregates were recorded.¹ The two quantum dot containing aggregates were mixed (2:1 volume ratio for adenosine and cocaine aggregates) in 200 mM NaCl, 25 mM TA, pH 8.2. Temperature-dependent emission spectra were collected and the change of peak intensities versus temperature was plotted in Figure S1. As can be observed from the figure, both aggregates have sharp melting transitions, confirming the formation of DNA-linked nanoparticle aggregates.

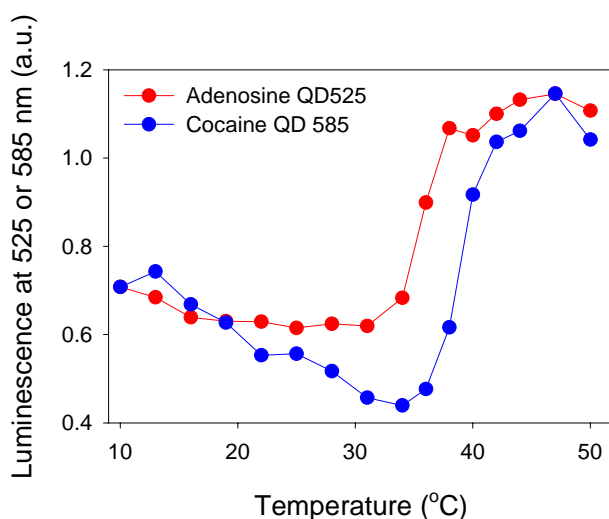


Figure S1. Melting curves of aptamer-linked nanoparticle aggregates containing both gold nanoparticles and quantum dots. The two melting curves were normalized to have the same initial fluorescence and the highest fluorescence point.

References:

- 1 Elghanian, R.; Storhoff, J. J.; Mucic, R. C.; Letsinger, R. L.; Mirkin, C. A., *Science* **1997**, 277, 1078-1080.