

*Supporting information*

**Effective detection and cell imaging of prion protein with  
new prepared targetable yellow-emission silver nanoclusters**

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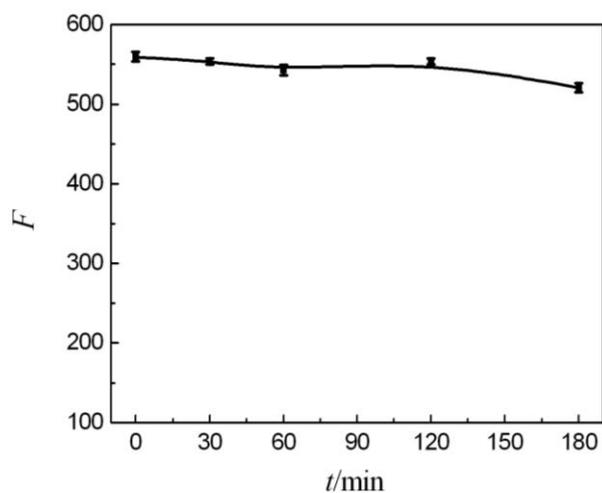
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**Fig. S1**

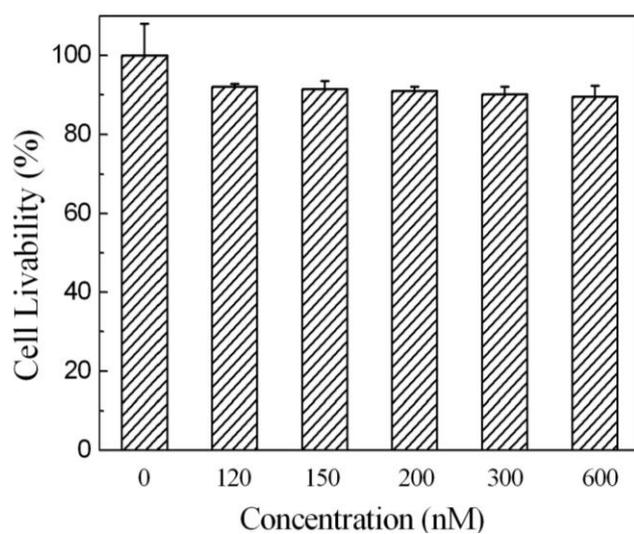
Fluorescence intensity changes of Apt-AgNCs in cell culture medium within 3 hours. The excitation was 490 nm, and emission was recorded at 565 nm. All data were collected from three measurements, and the error bars indicate the standard deviation.



**Fig. S2**

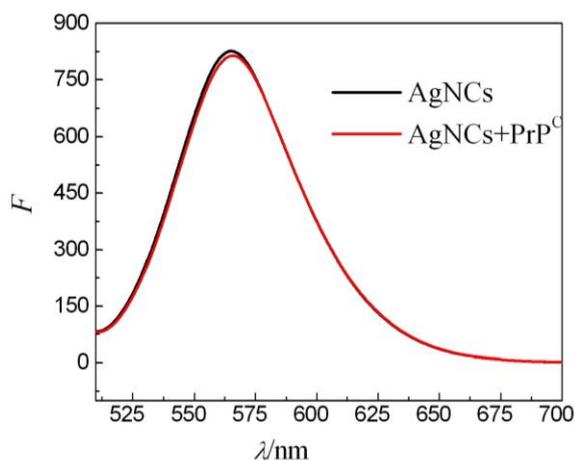
Cell growth inhibition assay of Apt-AgNCs to SK-N-SH cells after 24 h incubation.

All data were collected from three measurements, and the error bars indicate the standard deviation.



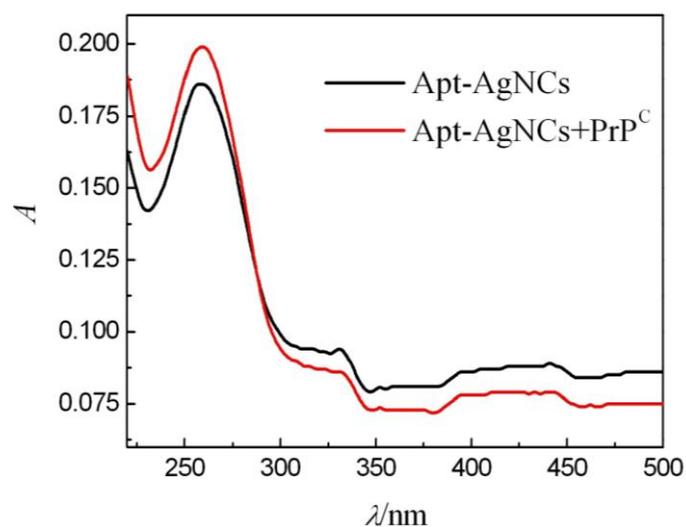
**Fig. S3**

Fluorescence emission spectra of AgNCs templated with the control sequence in the presence (red) and absence (black) of PrP<sup>C</sup>. The excitation was 490 nm, concentrations: AgNCs, 1  $\mu$ M; PrP<sup>C</sup>, 106 nM; pH 6.6



**Fig. S4**

UV-Vis spectra of Apt-AgNCs before (black) and after (red) the addition of PrP<sup>C</sup>. Concentrations: Apt-AgNCs, 1  $\mu$ M; PrP<sup>C</sup>, 106 nM; pH 6.6.



**Fig. S5**

The fluorescence decay curves of Apt-AgNCs before (black) and after (red) the addition of PrP<sup>C</sup>. Concentrations: Apt-AgNCs, 1  $\mu$ M; PrP<sup>C</sup>, 106 nM; pH 6.6.

