Electronic Supplementary Material (ESI) for Analytical Methods.

Supplementary information

β-cyclodextrin–modified silver nanoparticles as colorimetric probes for direct visual enantioselective recognition of aromatic *α*-amino acids

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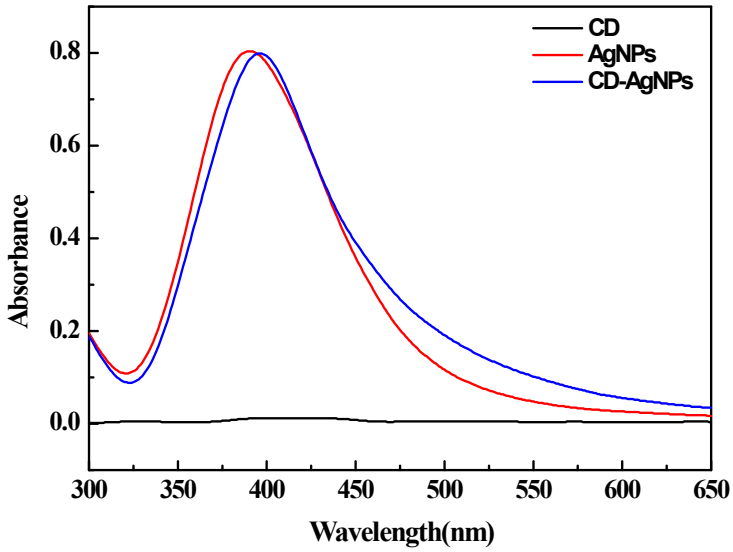

Figure S1. UV-vis absorption spectra of CD, AuNPs and β-CD–functionalized AgNPs.

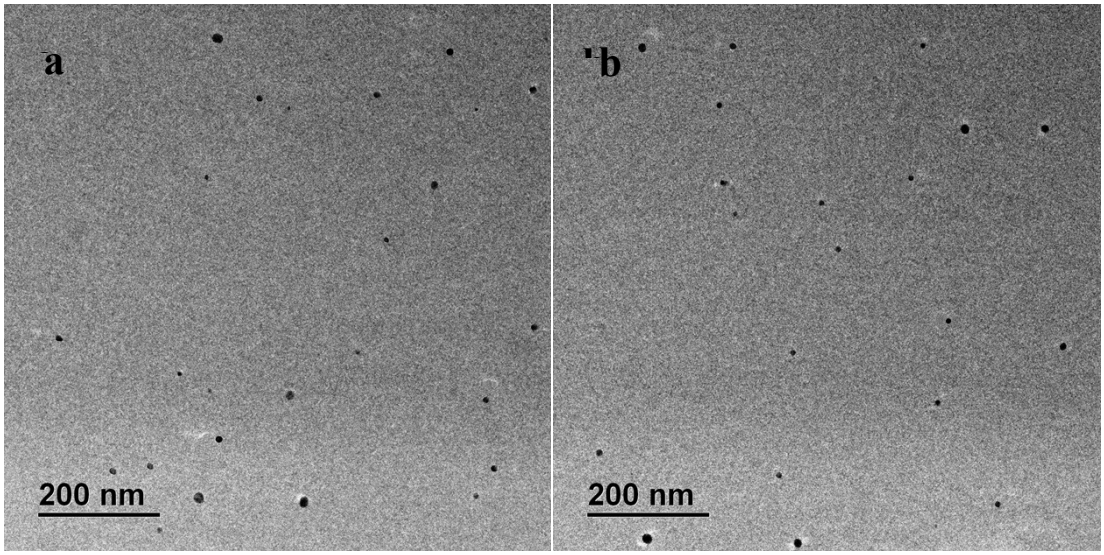

Figure S2. TEM images of AgNPs (a) and β-CD functionalized AgNPs (b).

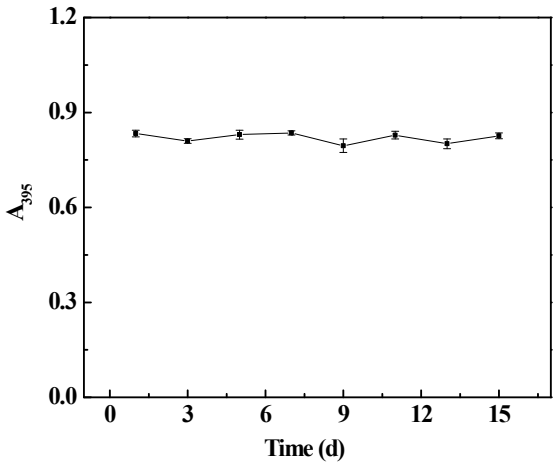

Figure S3. Absorption of β-CD–functionalized AgNPs affected by day at 395 nm.

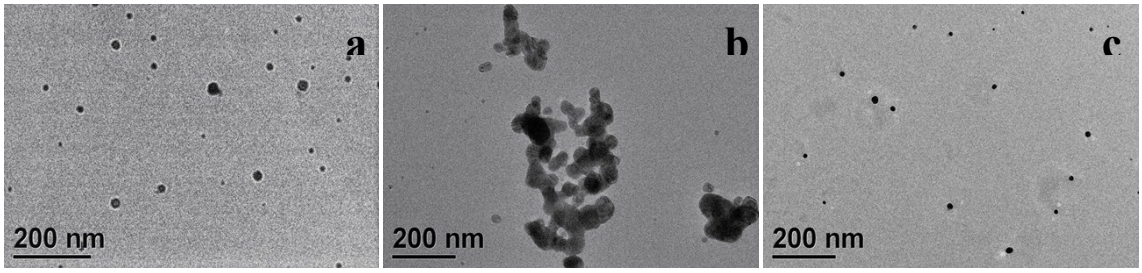

Figure S4. TEM images of β-CD functionalized AgNPs (a), β-CD functionalized AgNPs in the presence of 7 mM D-Phe (b), and β-CD functionalized AgNPs in the presence of 7 mM L-Phe (c).

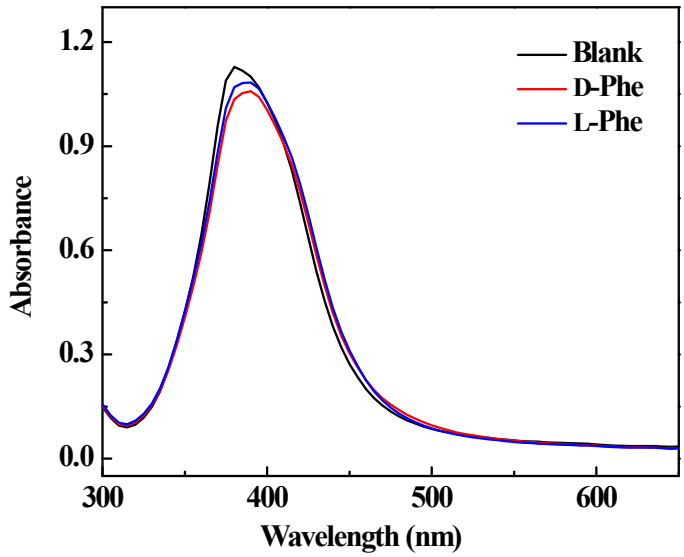

Figure S5. Absorption spectra of unmodified AgNPs in the presence of D–Phe or L–Phe. Experiment condition: 100 μL 10 mM PBS buffer (pH 7.0), 240 μL AgNPs (0.17 nM), 60 μL H_2O, 100 μL Phe (7 mM).

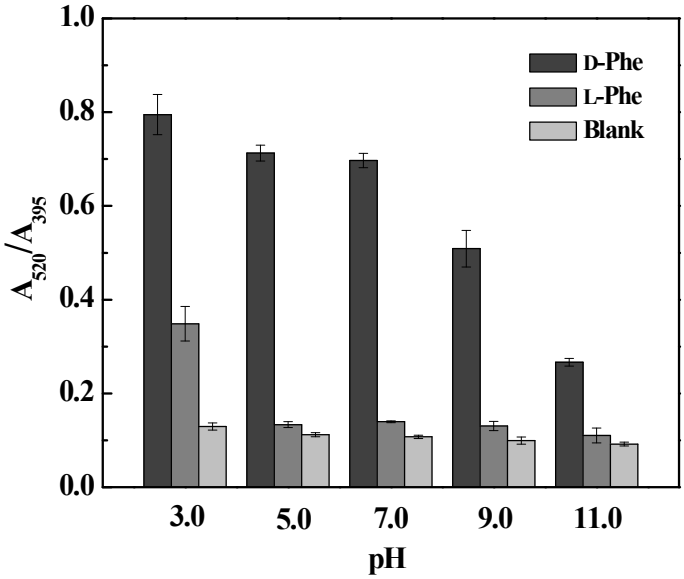

Figure S6. Plots of A_{520}/A_{395} ratio of β-CD–functionalized AgNPs upon the addition of D– or L–Phe at different pH.

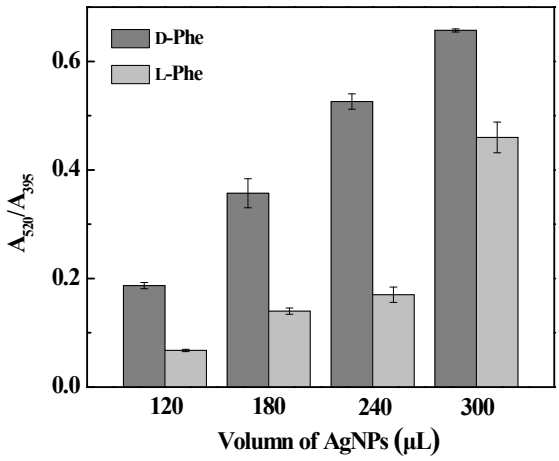

Figure S7. Effect of AgNPs amount (0.13 nM) on the absorption ratio (A_{520}/A_{395}) in the presence of D– or L–Phe.

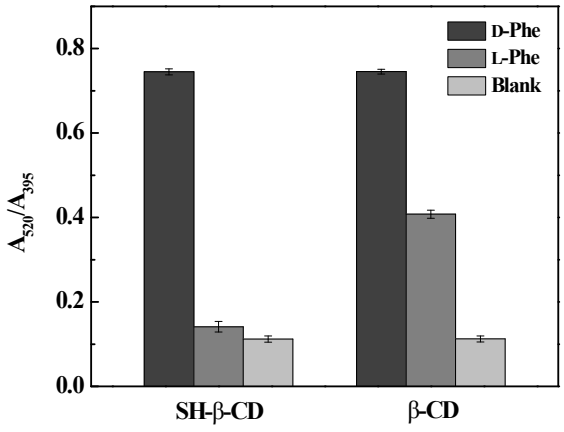

Figure S8. Plots of A_{520}/A_{395} ratio of the AgNPs using SH-β-CD and β-CD as modifying reagent in the presence of D– or L–Phe.

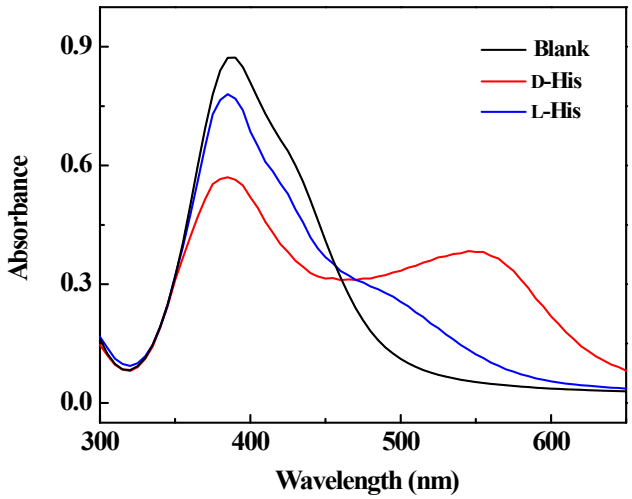

Figure S9. UV-vis absorption spectra of β–CD functionalized AgNPs upon the addition of 7 mM D- or L-His.