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 H2O, 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.