Electronic Supplementary Information (ESI)

β-cyclodextrin functionalized Mn-doped ZnS quantum dots for the chiral sensing of tryptophan enantiomers

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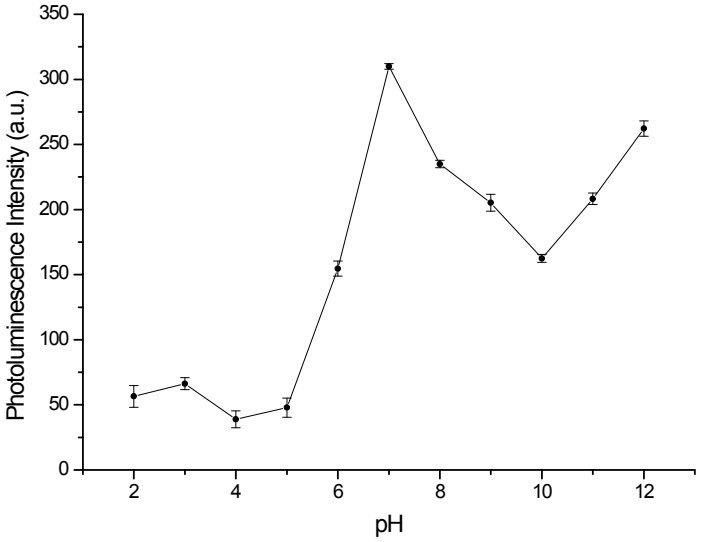

Figure S1 Effect of pH on the PL intensity of the as-synthesized β-CD-Mn-ZnS QDs

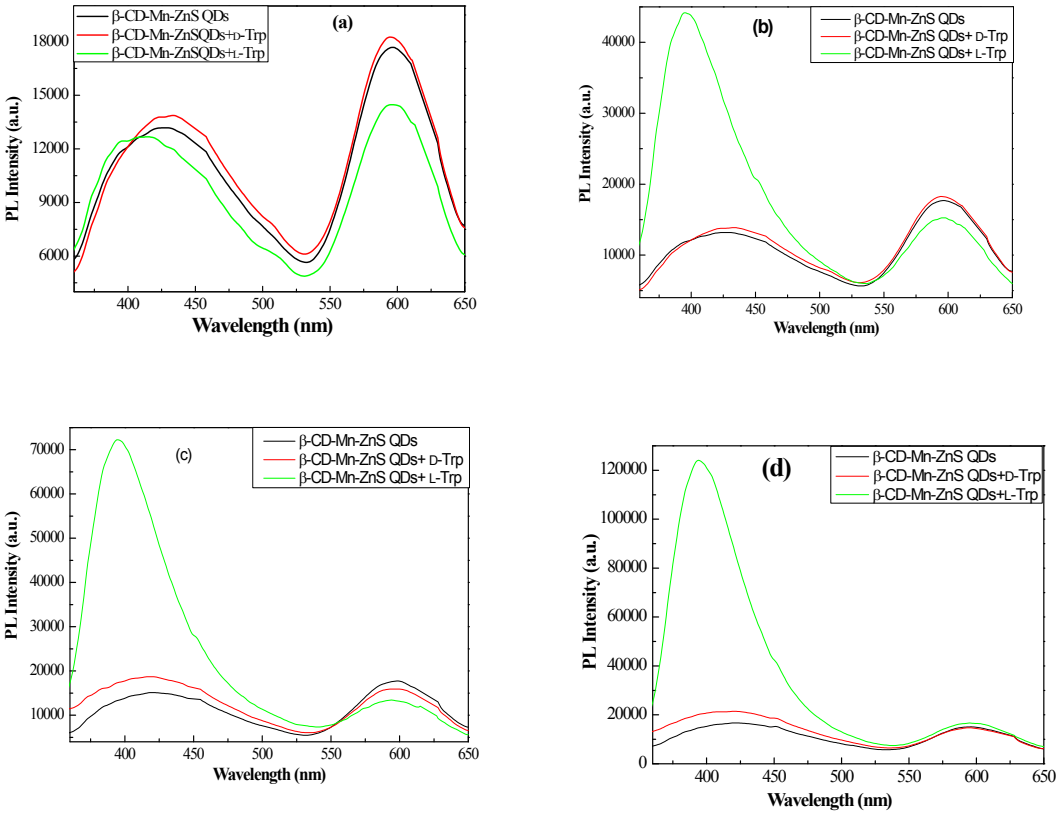

Figure S2 The PL spectra of β-CD-Mn-ZnS QDs with D- and L-Trp after standing (a)30min, (b) 2 h, (c) 12h and (d) 24h. The concentration of β-CD-Mn-ZnS QDs is 100 mg/L, and the concentration of Trp enantiomers is 0.7 μM.

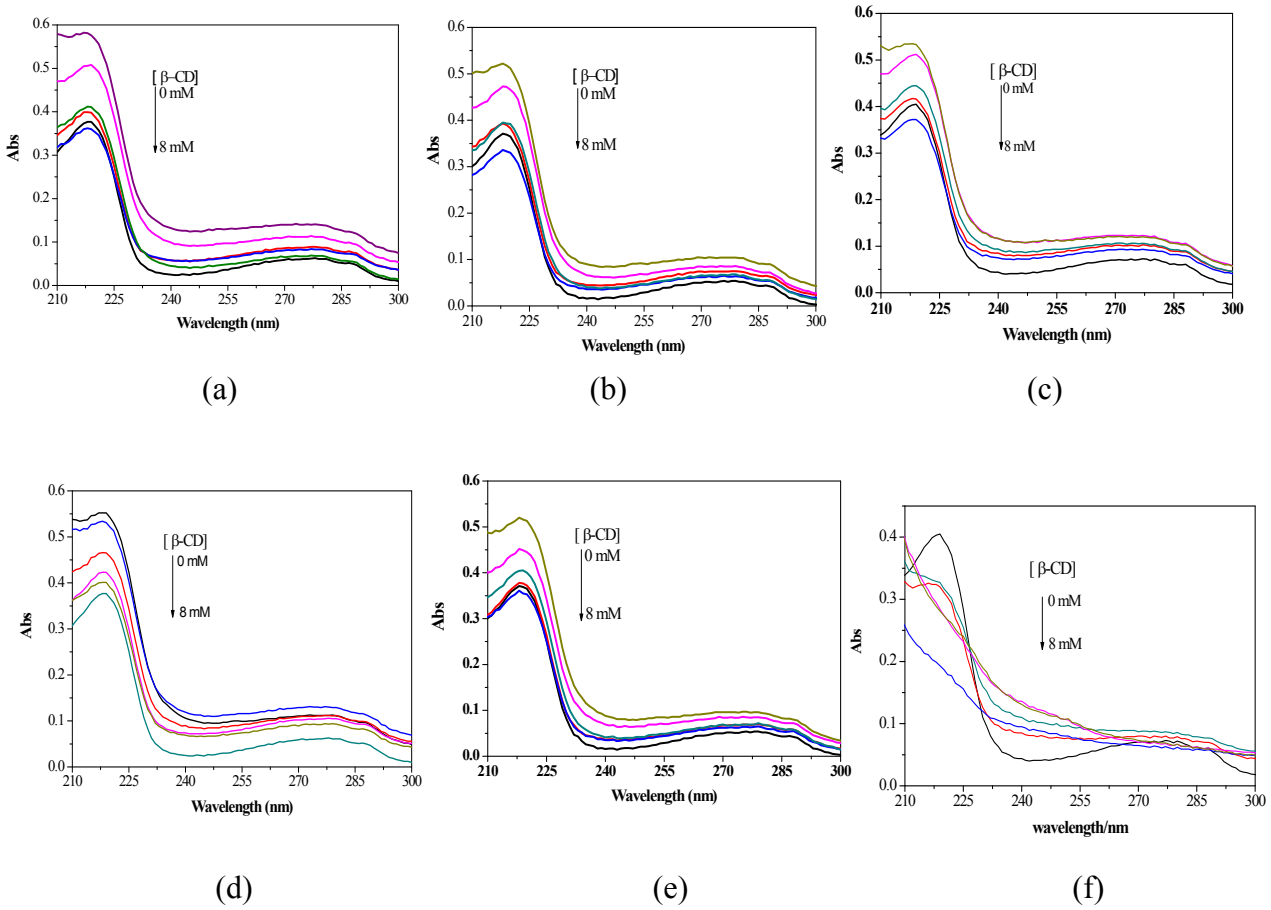

Figure S3 UV-vis spectra of (a, b, c) D-Trp (10 μM) and (d, e, f) L-Trp (10 μM) with various concentration of β-CD at (a,d) 30min, (b,e) 12 h and (c, f) 24 h.

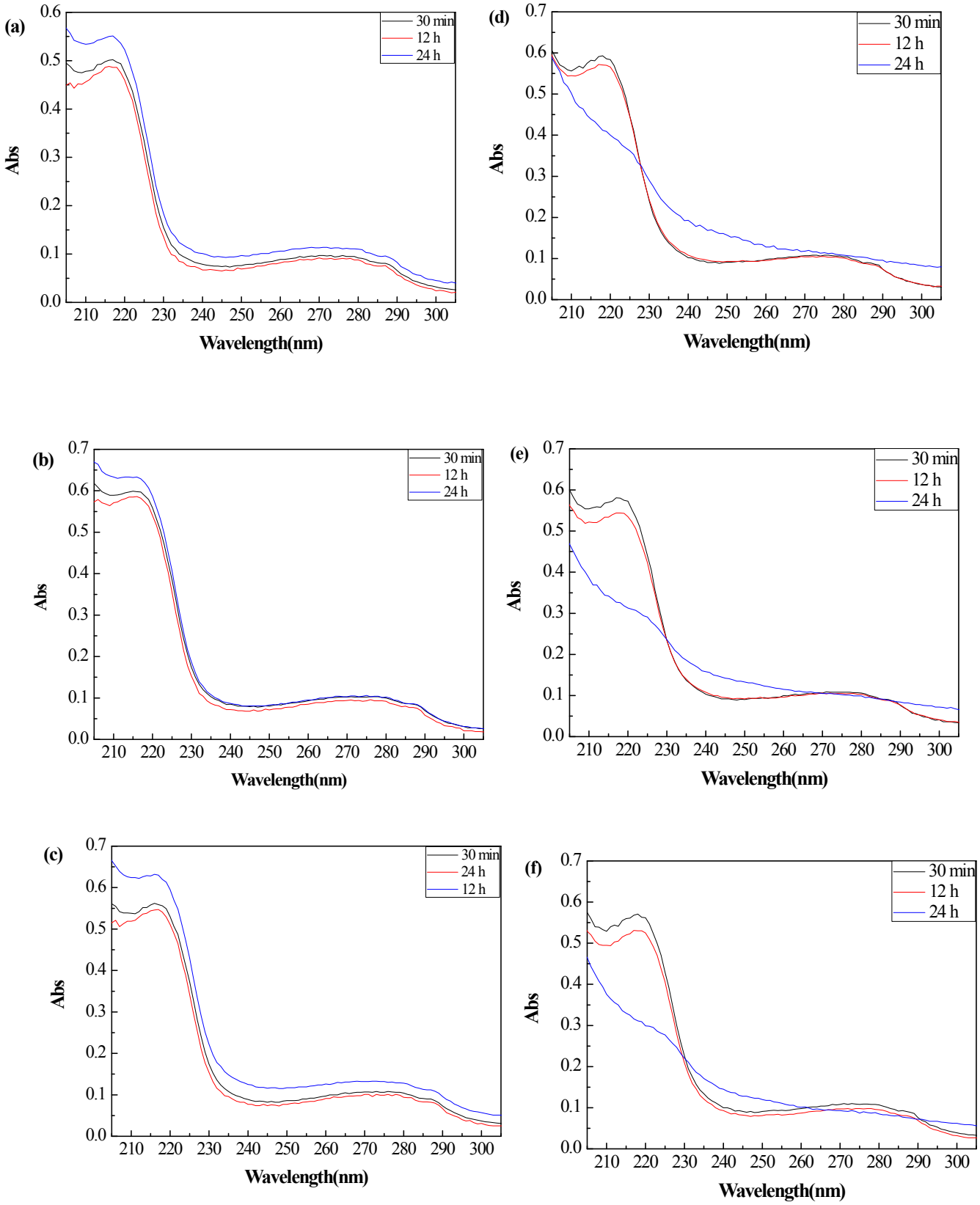

Figure S4 UV-vis spectra of (a, b, c) D-Trp (10 μM) and (d, e, f) L-Trp (10 μM) in the presence of 8 mM β-CD at 30min, 12 h and 24h. b, e: exposed to the ultraviolet light for 20 min； c, f : sterilized by 29 mmol/L $AgNO_3$.