

Fig.S1.The influence of pH on Zeta potential of SiO₂ NPs, SiO₂@PDA NPs and SiO₂@PDA@BSA NPs.

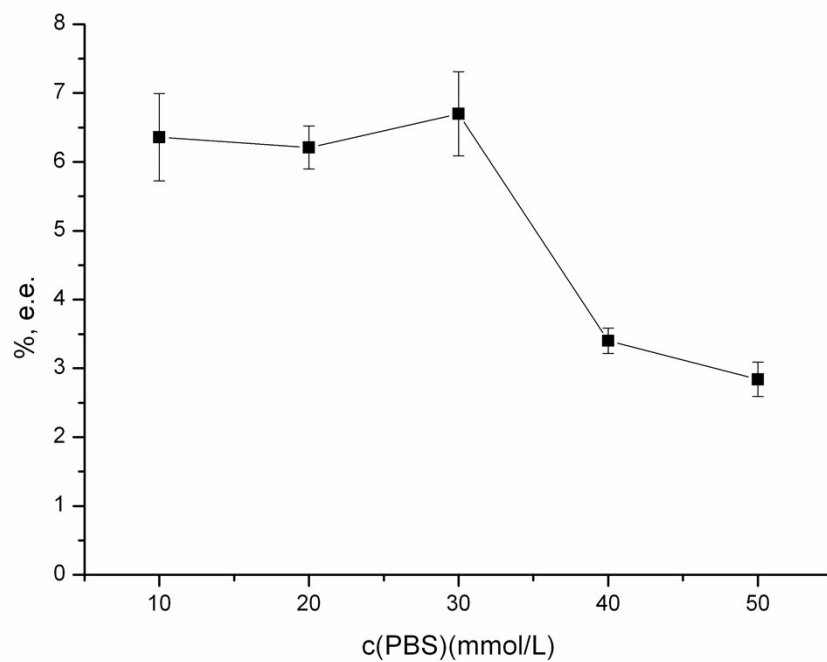


Fig.S2. The effect of PBS concentration on adsorption. Experimental conditions: 0.58 mg mL^{-1} racemate propranolol, phosphate buffer (pH 7.0) with $3 \text{ mg mL}^{-1} \text{SiO}_2\text{@PDA@BSA}$ NPs, ultrasonication for 5 min and vortex for 5 min. CE conditions are the same as in Fig. 1.

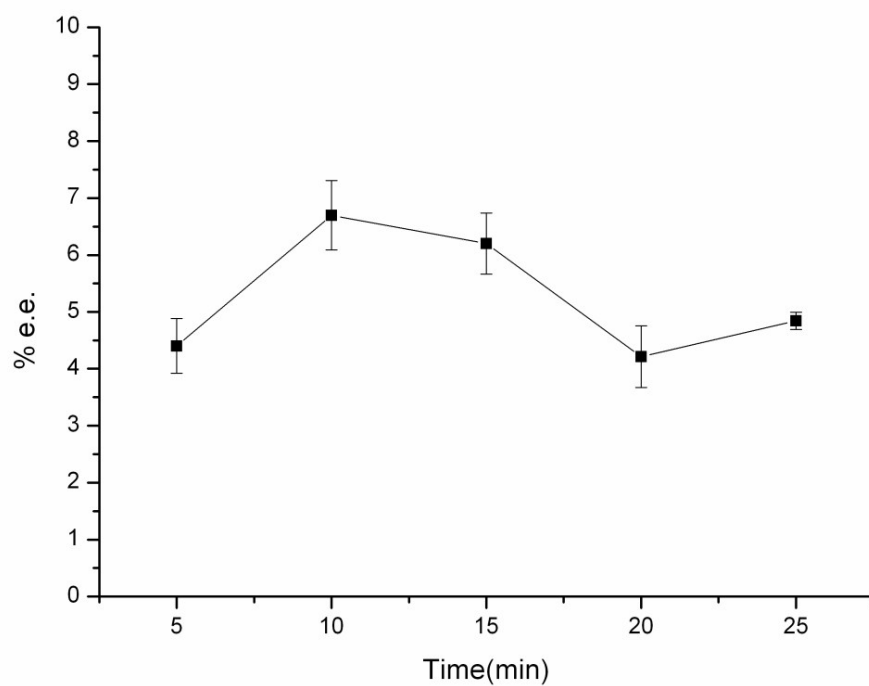


Fig.S3. The effect of adsorption time. Experimental conditions: 0.58 mg mL⁻¹ racemate propranolol, 30 mmol L⁻¹ phosphate buffer (pH 7.0) with 3 mg mL⁻¹ SiO₂@PDA@BSA NPs. CE conditions are the same as in Fig. 1.

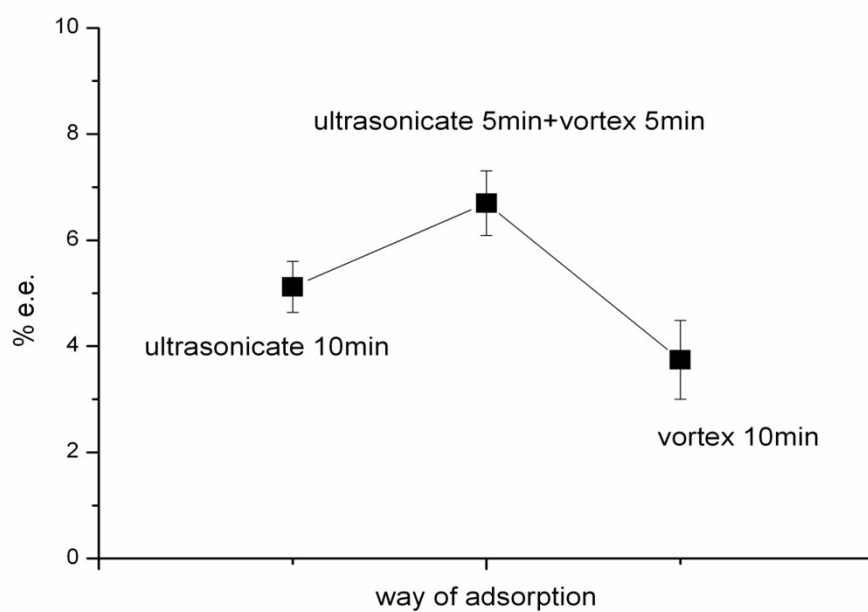


Fig.S4. The effect of adsorption mode. Experimental conditions: 0.58 mg mL⁻¹ racemate propranolol, 30 mmol L⁻¹ phosphate buffer (pH 7.0) with 3 mg mL⁻¹ SiO₂@PDA@BSA NPs. CE conditions are the same as in Fig. 1.

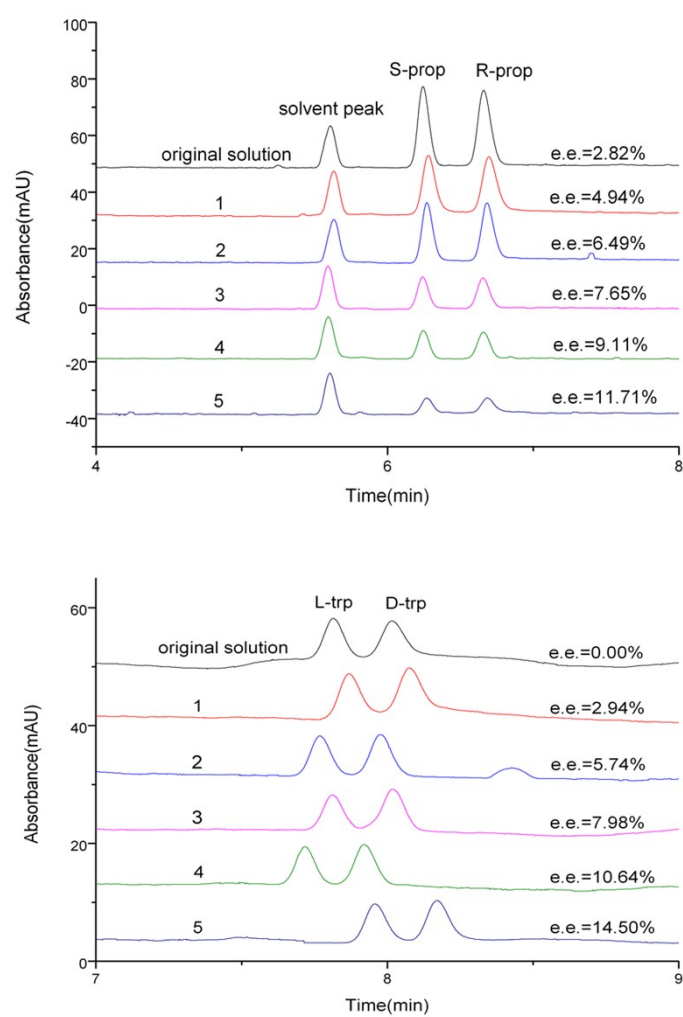


Fig.S5. The electropherograms of enantioselective separation of propranolol (A) and tryptophan (B) with five-step adsorption. CE conditions are the same as in Fig. 4.

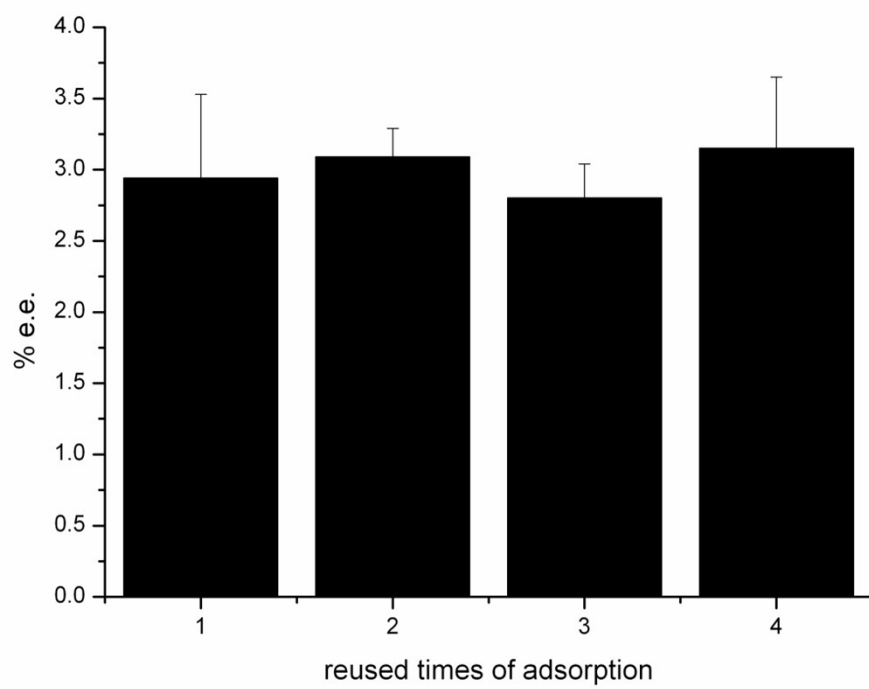


Fig.S6. Recycle of SiO₂@PDA@BSA NPs. CE conditions are the same as in Fig. 4.