

Electronic Supplementary Material

Copper (II) Ions Induced Self-Disproportionation of Enantiomers in Capillary Electrophoresis for the Quantification of Atenolol Enantiomers

Shaoqiang Hu

Henan Key Laboratory of Function-Oriented Porous Materials, College of Chemistry and Chemical Engineering, Luoyang Normal University, Luoyang 471934, China; shaoqianghu@lynu.edu.cn

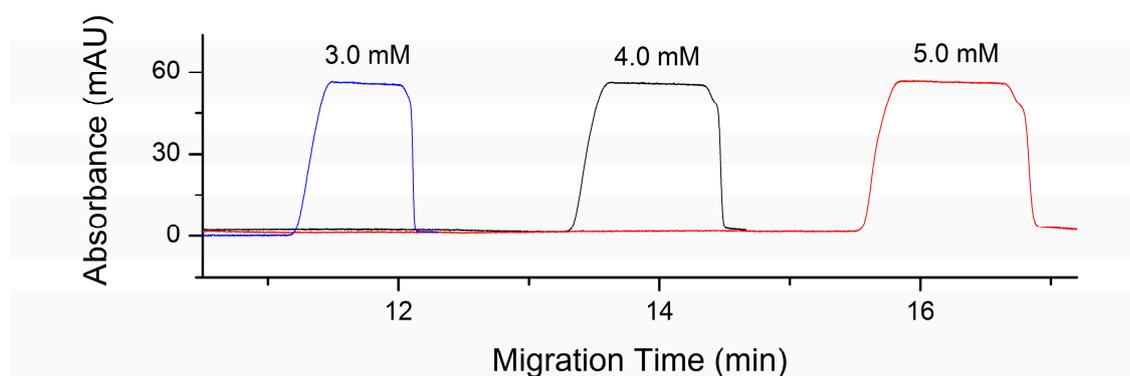


Figure S1. Effect of $\text{Cu}(\text{NH}_3)_4^{2+}$ concentration on the step shape. BGE component besides $\text{Cu}(\text{NH}_3)_4^{2+}$: 0.2 M NH_4OH , pH 11.0. Sample solution: mixtures of *S*- and *R*-atenolol in BGE with a total concentration of $0.4 \text{ mg}\cdot\text{mL}^{-1}$ and *R*-atenolol content of 10.0% (m/m). Capillary: id $50 \mu\text{m}$, od $350 \mu\text{m}$, length 60.0 cm, 51.5 cm to detector. Capillary temperature: $20 \text{ }^\circ\text{C}$. Hydrodynamic injection at 50 mBar for 60 s. Separation voltage: 30 kV. Detection wavelength: 230 nm.

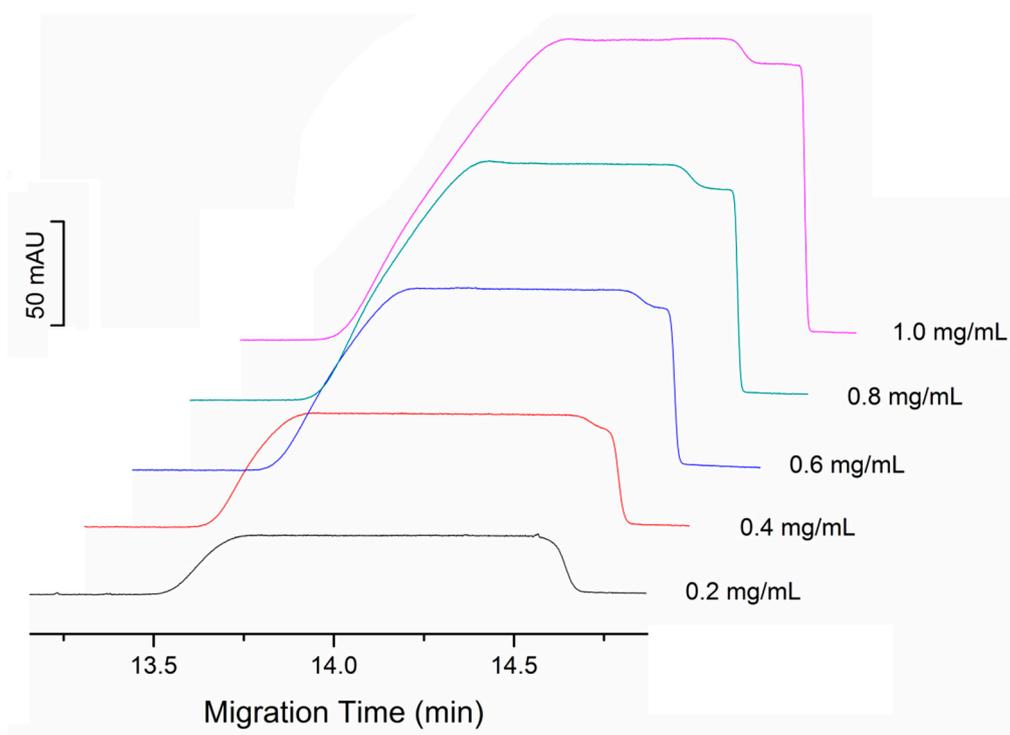


Figure S2. Effect of drug concentration (total concentration of two enantiomers) on the step shape. Sample solutions: mixtures of *S*- and *R*-atenolol in BGE with different total concentrations but a fixed *R*-atenolol content of 10.0% (m/m). BGE: 4.0 mM $\text{Cu}(\text{NH}_3)_4^{2+}$ in 0.2 M NH_4OH , pH 11.0. CE conditions are the same as in Figure S1.

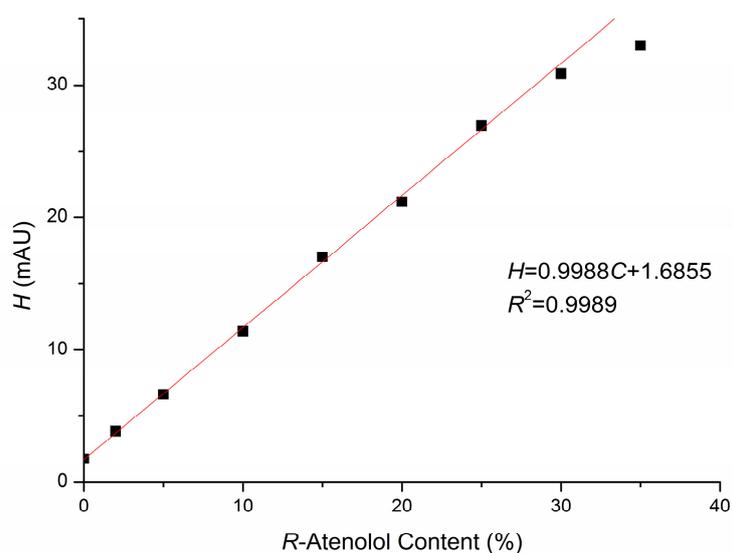


Figure S3. Linear relationship between the step height on CE curve and *R*-atenolol content. Sample solutions: mixtures of *S*- and *R*-atenolol in BGE with a fixed total concentration of $1.0 \text{ mg}\cdot\text{mL}^{-1}$ but different *R*-atenolol contents (m/m). BGE and CE conditions are the same as in Figure 2.