Chiral Separation by Capillary Electrophoresis based on Hyper-branched Materials

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In order to improve the chiral separation effect of capillary electrophoresis, a method based on hyper-branched materials was proposed. The mechanism of chiral separation in capillary electrophoresis was analyzed by using the capillary as a separation channel and high voltage direct current as the driving force. The experimental procedure was included preparation of the chiral separation by capillary electrophoresis, synthesis and preparation of hyper-branched materials and capillary, preparation of buffer solution and sample solution, and setting up chiral separation conditions of electrophoresis. Thus, combined with the chiral separation mechanism, the chiral separation by capillary electrophoresis was realized. Compared with the traditional separation method, the separation degree of the proposed separation technique was higher which indicates a significant improvement in the separation effect.

Keywords: Hyper-branched materials; Capillary; Electrophoresis; Chiral separation

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