Short Communication

Electrochemical Determination of Baicalein, Baicalin and Quercetin in Scutellaria barbata

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Scutellariae barbata, a Chinese traditional medicine plant, are composed of three important components (Baicalein, baicalin and quercetin). Nowadays, to develop a simple technique for determining the containing Baicalein, baicalin and quercetin accurately and economically is highly demanded. Herein, capillary electrophoresis (CE) was incorporated with electrochemical detection (ED) to provide more sensitive and selective determination method. Baicalein, baicalin and quercetin could be well separated within 12 min using the proposed CE-ED method with the optimum conditions. The detection limits (S/N=3) was in the concentration range of 0.214 to 0.495 μM for all three analysts. Owing to the high resolution, good reproducibility and excellent stability, the CE-ED method can be successfully employed for the determination of actual samples.

Keywords: Electrochemical detection; Capillary electrophoresis; Scutellariae barbata; Baicalin; Baicalein; Quercetin

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