Short Communication

Voltammetric Determination of Sulfadiazine Based on Molecular Imprinted Electrochemical Sensor

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doi: 10.20964/2020.10.10

Received: 3 June 2020 / Accepted: 28 July 2020 / Published: 31 August 2020

Voltammetric determination of sulfadiazine based on molecular imprinted electrochemical sensor is described in this work. The proposed sensor is based on glassy carbon electrode modified with sulfadiazine imprinted polymers. Cyclic voltammetry and differential pulse voltammetry technique were carried out to investigate the electrochemical behavior of sulfadiazine at the modified electrodes. Under the optimal condition, the proposed sensor exhibited a well linear relationship toward the sulfadiazine concentrations in the range of 4 to 50 μM , with a detection limit of 0.68 μM . The proposed sensor was successfully applied for the determination of sulfadiazine in real samples with satisfactory recovery.

Keywords: Molecularly imprinted polymers, Electrochemical sensor, Sulfadiazine

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