A12 Determination of Dextromethophan, Guaifenesin and Benzoate

in the Cough Syrup with HPLC

SHIH, JIA-SHENG, TANG, TZ-CIANG*

Department of Pharmacy, Chia Nan University of Pharmacy & Science

Abstract

HPLC is used to determine the main ingredients, such as dextromethophan, guafenesin, and benzoate in cough syrups. This method has been proved the effectiveness and accuracy of those ingredients determination. With gradient elution, which was comprised of phosphoric acid buffer and acetonitrile, active ingredients, excipients and baseline of degradation products in syrup would be separated within 16 minutes. With various compositions of mobile phase and detection wavelength, the chromatograms showed different results. The amounts of dextromethophan, guaifenesin and benzoate in commercial cough syrups were determined successfully by linear calibration graph with this method.