



DEVELOPMENT AND VALIDATION OF RP-HPLC METHOD FOR SIMULTANEOUS DETERMINATION OF COMBINED DRUGS IN PHARMACEUTICAL FORMULATION

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ABSTRACT:

An attempt has been made to develop simple, accurate, precise and rapid RP-HPLC methods for determination of Ramipril and Hydrochlorothiazide. RP-HPLC method was developed and validated for Ramipril and Hydrochlorothiazide in combined dosage forms. The separation was achieved by C₁₈ (YMC) column of (4.6×250 mm) with particle size packing 5 μm and Methanol : Water (70:30) (0.05 % OPA) as mobile phase at a flow rate of 0.7 ml/min. The detection was carried out at 212 nm. The retention time of Hydrochlorothiazide and Ramipril was found to be 8.38 min and 11.58 min respectively.

After establishing the chromatographic conditions, analysis of tablet formulation was done. The method has been found to be better because of its less retention time, isocratic mode and use of economical readily available mobile phase, readily available column, UV detection and better resolution of peaks. The method provides selective quantification of Ramipril & Hydrochlorothiazide. This developed RP-HPLC method for estimation Ramipril & Hydrochlorothiazide is accurate, precise and robust.

KEYWORD:-RP-HPLC, U.V. Visible Spectrometer, Ramipril, Hydrochlorothiazide.

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