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Assay of Levofloxacin and Ornidazole in Combined Dosage Generic Form by Reversed Phase High Performance Liquid Chromatography

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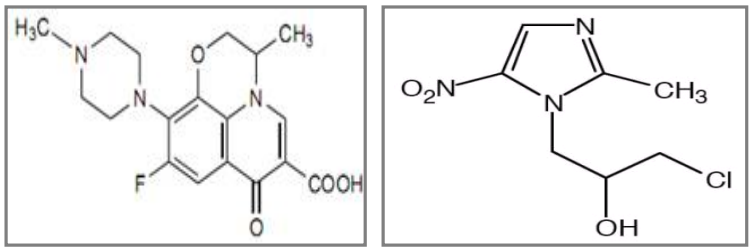
ABSTRACT

A new, sensitive, precise, and accurate validated reversed-phase-high performance liquid chromatographic assay method was reported for levofloxacin and ornidazole in combined dosage generic form. The present assay was developed using of C18 column (Inertsil 5µ, 250 mm × 4.6 mm) using the mobile phase potassium dihydrogen phosphate (pH 6.2) and acetonitrile (65:35%v/v)] at a flow rate was 1.0mL min^{-1} with UV detection wavelength of 300nm at ambient temperature. The developed RP-HPLC method was validated as per International Conference on Harmonization (ICH) guidelines with respect to specificity, limit of detection, limit of quantification, precision, linearity, accuracy, robustness and system suitability. The proposed reversed-phase-high performance liquid chromatographic method was found to be simple, sensitive and reproducible and can be used in routine analysis for simultaneous determination of levofloxacin and ornidazole in other brands of combined dosage forms.

Graphical Abstract



Chemical structure of Levofloxacin and Ornidazole

Keywords: Levofloxacin, Ornidazole Reversed-phase-high performance liquid chromatographic method and International Conference on Harmonization (ICH).