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A New Stability-Indicating RP-HPLC Method for the Determination of Retigabine in Oral Dosage Form

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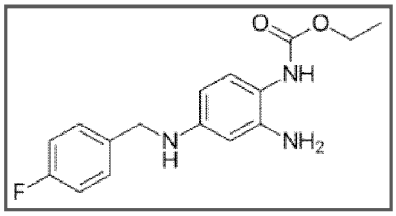
ABSTRACT

A new stability-indicating RP-HPLC method was developed for the determination of retigabine in oral dosage form, using a ODS, C_{18} RP-Column (Make: 250 mmx4.6 mm I.D; particle size 5µm) and a mobile phase composed of phosphate buffer (pH-3.8) and acetonitrile in the ratio of 55:45 %v/v at a flow rate of 1.0mL min^{-1}. The retention time of retigabine was found to be 2.741 min, respectively. Linearity was established for retigabine in the range of 10-60µg/ml, respectively. Retigabine was subjected to acid and base hydrolysis, oxidation and photolytic degradation conditions and the degradation products of retigabine were well resolved from the pure drug. This method can be successfully employed for the quantitative analysis of retigabine in various formulations respectively.

Graphical Abstract



Molecular structure of Retigabine

Keywords: Retigabine, Stability-indicating method.