

5th International Conference and Exhibition on Analytical & Bioanalytical Techniques

August 18-20, 2014 DoubleTree by Hilton Beijing, China

Development and validation of a RP- UFLC method for estimation of curcumin in anti diabetic poly herbal formulation

Rashmi N G and Gurupadayya B M
JSS University, India

Curcumin is an ancient medicine, having various remedial properties and it might be utilized for the medication of chronic disorder like diabetes, cancer, arthritis, HIV infections and etc. The principle destination of our work was to develop a simple, rapid and sensitive reverse phase ultra fast liquid chromatographic (RP-UFLC) method for estimation of curcumin in anti-diabetic poly herbal formulation (Mehagni). A basic chromatography partition was carried out by utilizing an reverse phase C₁₈ column (250 x 4.6 mm) isocratic flow with the constituted a mixture of methanol and 2% acetic acid as a mobile phase at the proportion of 70:30 v/v with the flow rate of 1.2 ml/min. the absorbance measured at 420 nm by using UV spectrophotometry. The method was validated as indicated by ICH guidelines distinctive parameters, such as specificity, sensitivity, linearity, precision, accuracy, ruggedness, robustness and system suitability were performed. Optimized chromatographic conditions were attained and effects demonstrated good peak resolution. The retention time was found at 5.02 min. The framework was linear with a correlation co-efficient of 0.9945. %RSD of system and method precision were resolved to be 1.14 and 1.13. The LOD & LOQ for curcumin was found to be 0.2 µg & 0.65 µg. The calibration curve was fixed at 5-25 µg/ml. The change in analytical technique parameters, investigator and laboratory conditions did not influence the results.

ng.rashmi85@gmail.com