

Research article

Development of analytical method and validation for determination of Lisinopril dihydrate in bulk drug and dosage form using HPTLC method

Sarfraz Khan, Furquan N. Khan*, Mohammad Sadeque, Rana Zainuddin, Zahid Zaheer

Department of Quality Assurance, Y. B. Chavan College of Pharmacy, Dr. Rafiq Zakaria Campus, Rauza Bagh, Aurangabad – 431001. Maharashtra, India.

Key words: Lisinopril, HPTLC, Validation

***Corresponding Author: Furquan N. Khan,** Department of Quality Assurance, Y. B. Chavan College of Pharmacy, Dr. Rafiq Zakaria Campus, Rauza Bagh, Aurangabad – 431001. Maharashtra, India.

Abstract

A simple, reproducible and efficient High Performance Thin Layer Chromatography method was developed for Lisinopril dihydrate in bulk drug and dosage form. A constant application rate of 0.1 ml/s with nitrogen aspirator was used, and the space between two bands was 6 mm. The slit dimension was 5×0.45 mm, and the scanning speed was 10 mm/s. The mobile phase consisted of n-butanol: methanol: ammonia in the ratio of 3.0: 1.0: 1.0 (v/v/v). The retention time (min) and linearity range (μ l) for Lisinopril was (0.20) and (1-5) respectively. The method so developed was validated for its accuracy and precision. The LOD and LOQ were found to be 0.050237 and 0.152233 for Lisinopril respectively. The accuracy was found to be 98.88%. The developed method was found to be accurate, precise and selective for determination of Lisinopril in bulk and dosage form.
