International Journal of ChemTech Research
CODEN(USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.10 No.5,pp 203-209,2017

Develop an Analytical Procedure for Measure the Quantity Based Qualityof Metoprolol Tartrate Drug Content from Marketed Tablets by Reversed Phase-HPLC Method

Raju Chandra[1]*, Deepak Kumar[2] and NavneetKaur[2]

[1]Department of Chemistry, Dolphin Institute of Biomedical and Natural Sciences, Dehradun-248001, Uttarakhand, India.
[2]Department of Pharmaceutical Chemistry, Dolphin Institute of Biomedical and Natural Sciences, Dehradun-248001, Uttarakhand, India.

Abstract: Assay is play an important role for assure the quality of the pharmaceutical product. A large number of techniques have been applied for assure the quality of the pharmaceutical products. The present study has been done by reversed-phase high performance liquid chromatography. Reversed high performance liquid chromatography was equipped with UV detector. The active ingredient metprololtartarate was analysed by reversed phase C_{18} column. The mobile phase (methanol and water) was used in the ratio 70:30. The Wave length (215 nm) of active ingredient metoprolol tartrate was determined by UV spectrophotometer. The retention time of metoprolol tartrate was 5.3 min. The correlation coefficient (R^2=0.999) was obtained with correlation range 10-100 ppm. The limit of detection and limit of quantification of the instrument were calculated 0.02 and 0.09 µg/mL, respectively. The accuracy of the method validation was determined by recovery method at three concentration level 5, 10 and 15 µg/mL. The accuracy of the method was obtained 99.80 %, 98.00 % and 102.72 %. The new method was validated according to international conference harmonization guidel.
Keywords: Metoprolol tartrate, RP-HPLC, Tablets.

*****