Nada Abdelwahab, Pharm Anal Acta 2016, 7:2(Suppl)
http://dx.doi.org/10.4172/2153-2435.C1.031

OMICS International
conferenceseries.com

International Conference and Exhibition on

Advances in HPLC & Chromatography Techniques

March 14-15, 2016 London, UK

Application of green micellar UPLC for analysis of the anti-epileptic levetiracetam and its toxic impurity

Nada Abdelwahab
Beni-Suef University, Egypt

Nowadays, analytical chemistry community is aware of the hazardous influence of chemicals on both health and environment. Additionally, chemists are more interested in eco-friendly methods of analysis. Levetiracetam (LEV) is an antiepileptic drug with no significant interaction with other medications and so it is a safe treatment in elderly people. The toxic pyridine-2-ol is reported in BP to be LEV impurity C (IMP) and related substance. A highly sensitive eco-friendly UPLC method has been developed and validated for the first time for analysis of LEV and its toxic IMP. Separation has been carried out on CN column using 0.1% aqueous sodium lauryl sulphate: acetonitrile (7:93, v/v) with UV scanning at 205 nm. USP recommendations for method validation have been followed with respect to linearity, accuracy, robustness and ruggedness. The proposed method was successfully applied for the determination of LEV in its tablet dosage form and statistical analysis with the reported method showed no significant difference at confidence limit of 95%. The short run time (<3 minutes) and high sensitivity are of the most advantageous of developed method over the reported one.

Biography

Nada Abdelwahab has completed her PhD and is Associate Professor of Analytical Chemistry, Faculty of Pharmacy Beni-Suef University. She has published several papers in different chromatographic and spectroscopic methods of analysis and is a potential reviewer in many international journals.

nadasayed2003@yahoo.com

Notes: