

عنوان مقاله:

Simultaneous UV-Vis Spectroscopic Detection of Metformin and Glibenclamide from Electrospun PCL/PEG Nanofibers

محل انتشار:

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خلاصه مقاله:

In this paper, glibenclamide and metformin are simultaneously detected which are released from a system of PCL/PEG nanofibers using UV-Vis spectroscopy and Q-analysis method. PEG/PCL nanofibers for extended-time co-delivery of metformin and glibenclamide were prepared by electrospinning technique. These fibers were mostly cylindrical with an average diameter of ۱۰۰ to ۶۳۰ nm with a reasonably uniform diameter for each system. It is shown that this method presents a viable groundwork for the required task. Absorbance of metformin and glibenclamide were calculated for ۲ to ۴۰ ug/ml at wavelengths of ۲۳۰ and ۳۰۰ nm. Calibration curves and Absorptivities of each sample was calculated and statistical analysis shows that the method is viable to simultaneously determine metformin and glibenclamide from release system.

کلمات کلیدی:

UV-Vis spectroscopy, Simultaneous, Drug Release, Nanofiber

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