Colorimetric Determination of Pregabalin in Pharmaceutical Formulation

Hayam Lotfy · Mostafa Shehata · Hayam M. Lotfy · Mohammad A. Elsayed · Adel M. Awad ·

Professor of Analytical Chemistry

Abstract

Three simple and accurate colorimetric methods for the determination of pregabalin (PGB) are described. The first method depended on the reaction of pregabalin with ninhydrin reagent. The colored product was measured at 568 nm. Beer’s law was obeyed in the concentration range 5-30 μg ml-1. The second method was based on the reaction of pregabalin with p-benzoquinone (PBQ) in presence of borate buffer pH 7.8 and the developed color was measured at 505 nm. The linearity range was found to be 100-180 μg ml-1. The third method was based on the reaction with vanillin (Duquenois reagent) in presence of Mcilvain buffer pH 7.5. The color developed was measured at 392 nm. The linearity range was found to be 160-320 μg ml-1.