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Colorimetric estimation for salbutamol sulphatein pure form and in different types of pharmaceutical

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Abstract: Anew sensitive, simple and accurate colorimetricapproach is suggestedof the estimationof salbutamolsulphate drugin pure form ,also in different types of pharmaceutical. Theapproach isestablished onthe conjunction of salbutamol (SLB) drug and the reagent 4-aminoantipyrine (4-AAP) reagentin basic medium to obtain a newly ligand that reacts with cobalt (II) to producehighly intensity red colourcomplex at 60°C. The watersoluble dye is stable and estimatedcolorimetric ally with maximum absorption at(500nm).The calibration curvebetween the concentration and the absorbance showsthat the range of concentration was applied by the Beer's law between(2-60µg/mL).The optimization of the experiential circumstances is examined. The precisionand the accuracy for the approach aretested by the average relative standard deviation values (1.32%) and the average recovery values (100.23%) respectively.That it is based on the concentration.The approach sensitivity is obtained by molar absorptivity (0.6558×10^4 l. .cm^{-1}.mol^{-1}). the sensitivity of Sandell is calculated (0.036 µg.cm^{-2}). The analytical data for The approach is matched with the standard method. The general interference from drug additives was examined. The suggested approach is successfully applied on the estimation of (SLB) in various types of pharma.
Keywords:colorimetric; estimation; salbutamol sulphate ; pure form ; types of; pharmaceutical.

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