

Simultaneous determination of antihistamine anti-allergic drugs in pharmaceutical and bio- fluid

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A new accurate, specific, precise, reverse phase high performance liquid chromatographic (RP-HPLC) method has been developed and validated for the simultaneous determination of cetirizine/levocetirizine, chlorpheniramine maleate, loratidine, domperidon along with buclizine and meclizine in its pharmaceutical dosage form and human serum involving pyridoxin as internal standard using UV detection. The effluent was spectrophotometrically monitored at 230 nm. The intra-day and inter-day precisions showed coefficients of variation always less than one. The calibration curve was linear with a correlation coefficient of >0.999 in all the cases. The averages of the absolute and relative recoveries were found to be in the range of 98 to 102%. The proposed HPLC method was successfully applied to quantify the amount of antihistamines in pharmaceutical tablet dosage form and blood serum samples with recoveries in agreement with the stated contents.

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