



Densitometric Determination of Risedronate Sodium in Tablets

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SUMMARY. An HPTLC method for analysis of risedronate sodium in bulk and pharmaceutical formulation has been established and validated. The analyte was separated on aluminium plates precoated with silica gel 60 F₂₅₄. The mobile phase was water-acetonitrile-ammonia solution 9.3:0.40:0.3 (v/v). Quantification was done by densitometric scanning at 262 nm. Response was a linear function of risedronate sodium concentration in the range of 5 to 25 µg/mL. The limit of detection and quantification for risedronate sodium were 0.86 and 3.03 µg/mL respectively. Average recovery of risedronate sodium was 99.31, which shows that the method was free from interference from excipients present in the formulation. The established method enabled accurate, precise, and rapid analysis of risedronate sodium in bulk as well as pharmaceutical formulation.

KEY WORDS: HPTLC, Risedronate sodium, Tablets.

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