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SPECTROFLUORODENSITOMETRIC DETERMINATION OF METHYLTESTOSTERONE
IN VITAMIN-HORMONE PREPARATIONS



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ABSTRACT

Methyltestosterone in pharmaceutical preparations, especially vitamin-hormone preparations, could be determined accurately and rapidly by spectrofluorodensitometer. Methyltestosterone was separated from other substances by using precoated TLC plate aluminum oxide 150 F₂₅₄ (type T). A 60:40 mixture of benzene and diethyl ether was selected as mobile phase. The chromatogram was heated at 150°, Δ^4 -3-keto group of methyltestosterone molecule was converted to blue fluorescent compound, in which aluminum oxide acted as oxidation catalyst. The blue fluorescence intensity of spots were measured using spectrofluorodensitometer with maximum excitation wavelength at 366 nm and maximum emission wavelength at 454 nm. The method of determination of methyltestosterone in commercially available vitamin-hormone preparations in various formulations and dosage forms gave high accuracy and good reproducibility. The proposed method which was convenient and selective, is a useful method for quality control of methyltestosterone in pharmaceutical preparations.



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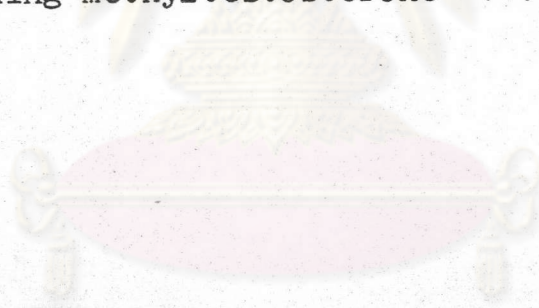
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