D-4 REAGENT AS A REPLACEMENT FOR STRONGLY BASIC MOBILE PHASES IN CIMETIDINE ANALYSIS

Cimetidine, introduced as TAGAMET by SKF Laboratories, Philadelphia, PA., is one of several new compounds referred to as hydrogen-receptor antagonists and has been found to be highly effective in treating patients with peptic and gastric ulcers. Several papers (1,2) have described its chromatography and subsequent quantitation from whole blood and urine.

The majority of these assays involve concentrated ammonium buffers (pH=10.5) and silica columns, drastically shortening the lifetime of columns. The successful application of Waters Radial-PAK CN cartridge and Reagent D-4 has allowed rapid elution of cimetidine on the RCSS (below) in comparable analysis times and facilitated analysis of this pharmacologically important amine.

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Column: Radial-PAK CN (8mm x 10cm, 10µ)

Solvent: 0.01M D-4 Reagent

Flow Rate: 2 ml/min.

Detector: Waters M450,228 nm, 0.1 AUFS

e Volume: 10 µl

SCH,CH,NHO

This applications information is for INVESTIGATIONAL USE ONLY and is not intended to be considered as a complete in Vitro Diagnostic Procedure.

- (1) Ziemiak, J.A., et al, Clinical Chemistry, 27, No. 2, 272-275 (1981)
- (2) Randolph, W. C., et al, J. Pharmaceutical Sci., 66, No. 8, 1148-1150 (1977)

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