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Ranitidine in Serum

Waters Corporation



This is an Application Brief and does not contain a detailed Experimental section.

Abstract

This application brief highlights the analysis of ranitidine in serum using Symmetry Shield ${\sf RP_8}$ Columns.

Introduction

The compounds analyzed in this study are:

- 1. Sulfanilamide (I.S.)
- 2. Ranitidine

$$H_2N$$
 \longrightarrow SO_2NH_2

1. Sulfanilamide

2. Ranitidine

Experimental

HPLC Method

Column: Symmetry Shield RP8, 3.9 x 150 mm, 5 μ m

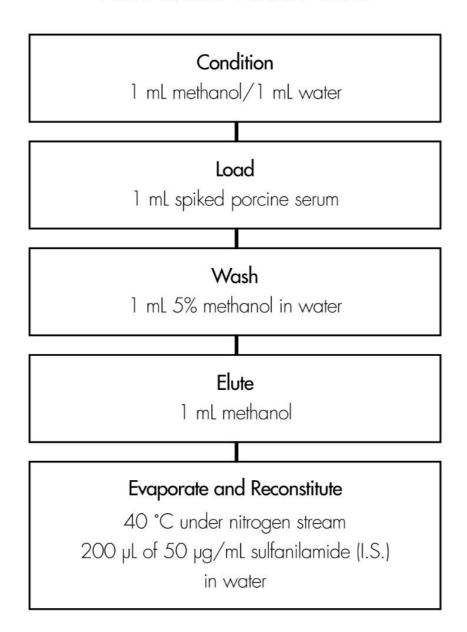
Guard column: Symmetry guard column, 3.9×20 mm, $5 \mu m$

Part numbers: Column - WAT200655, Guard - WAT200675

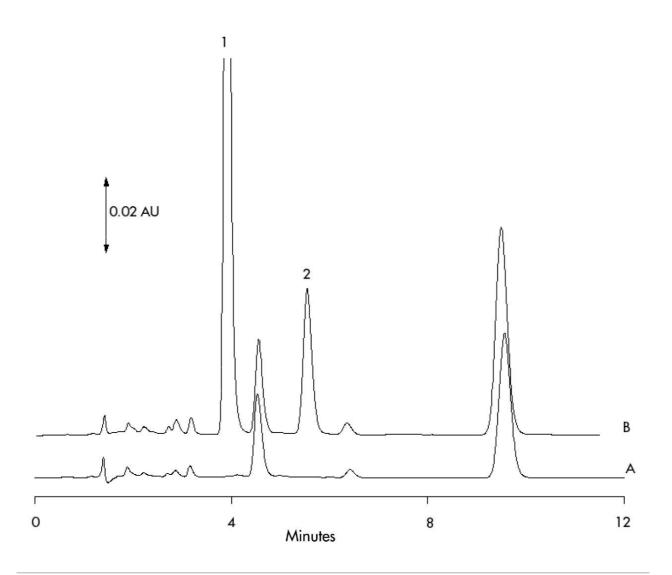
Mobile phase:	20 mM potassium phosphate, pH 3.0/methanol	
	97:3	
Flow rate:	1.0 mL/min	
Injection volume:	50 μL of reconstituted porcine serum extract	
Temperature:	30° C	
Detection:	UV @ 220 nm	

Oasis® HLB Extraction Method

Oasis® HLB 1 cc/30mg Extraction Cartridge Part Number WAT094225



Compound	Concentration µg/mL	% Recovery	%RSD (n=6)
Ranitidine	0.100	104%	1.9%
	0.500	102%	1.7%



Chromatogram of Serum Extracts: A) Blank B) Spiked Sample.

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