Waters™

アプリケーションノート

Sulfa Drugs in Serum (Antibacterial)

Waters Corporation



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

Abstract

This application brief demonstrates analysis of sulfa drugs in serum.

Introduction

The compounds used in this study are -

- 1. Sulfadiazine
- 2. Sulfathiazole (I.S.)
- 3. Sulfamerazine

$$\mathsf{NH}_{2} - \left\langle \begin{array}{c} \\ \\ \\ \\ \\ \\ \end{array} \right\rangle = \mathsf{SO}_{2} \mathsf{NH} - \left\langle \begin{array}{c} \\ \\ \\ \\ \\ \end{array} \right\rangle$$

SULFADIAZINE

SULFATHIAZOLE (I.S.)

SULFAMERAZINE

Experimental

HPLC Method

Column: Symmetry C_{18} , 3.9×150 mm, $5 \mu m$

Part number: WAT046980

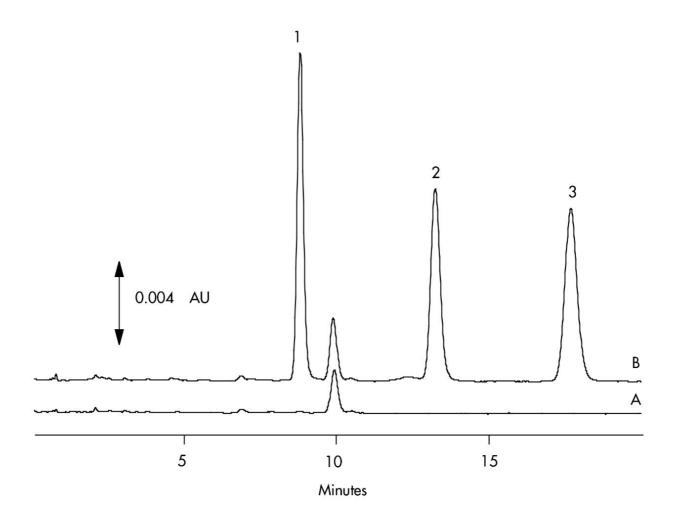
Mobile phase: 1% glacial acetic acid and 4% methanol in water

Flow rate:	1 mL/min
Injection volume:	10 μ L of reconstituted porcine serum extract
Temperature:	25 °C
Detection:	UV @ 254 nm

OASIS® HLB EXTRACTION METHOD

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

CONDITION: 1 mL methanol/1 mL water LOAD: 1 mL spiked porcine serum with 10 µg/mL sulfathiazole (I.S.), 20 µL phosphoric acid WASH. 1 mL 5% methanol in water **ELUTE:** 1 mL methanol EVAPORATE AND RECONSTITUTE: 40 °C under nitrogen stream 1 mL mobile phase



Compound	Concentration µg/mL	% Recovery	%RSD (n=6)
Sulfadiazine	2.00	98.4%	2.7%
	10.0	96.9%	0.65%
Sulfamerazine	2.00	93.5%	1.9%
	10.0	96.4%	0.74%

Featured Products

WA31764.142, June 2003

© 2021 Waters Corporation. All Rights Reserved.