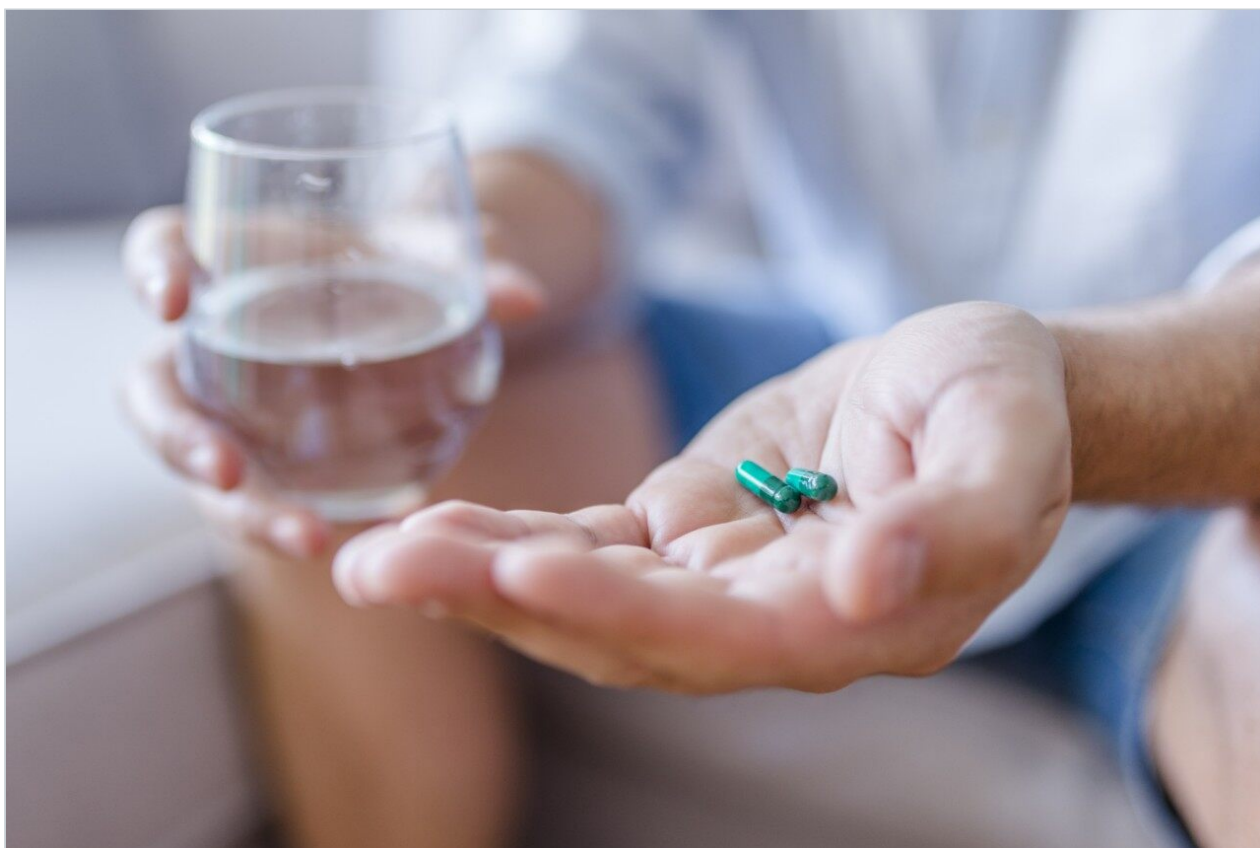


## Sulfa Drugs in Serum

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Waters Corporation



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

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### Abstract

This application brief highlights the analysis of sulfa drugs in serum using Symmetry columns.

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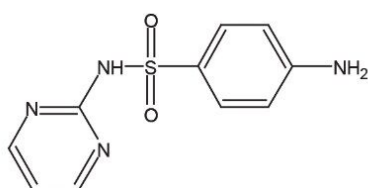
## Introduction

Compounds used in this study are:

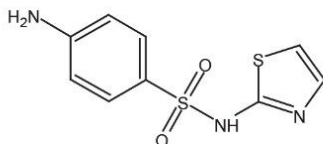
1: Sulfadiazine

2: Sulfathiazole (I.S.)

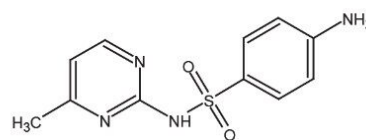
3. Sulfamerazine



**1. Sulfadiazine**



**2. Sulfathiazole (I.S.)**



**3. Sulfamerazine**

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## Experimental

### HPLC Method

Column:	Symmetry C <sub>18</sub> , 3.9 x 150 mm, 5 µm (p/n: WAT046980)
Mobile phase:	1% glacial acetic acid and 4% methanol in water
Flow rate:	1.0 mL/min
Injection volume:	10 µL of reconstituted porcine serum extract
Temperature:	25° C

Detection:

UV @ 254 nm

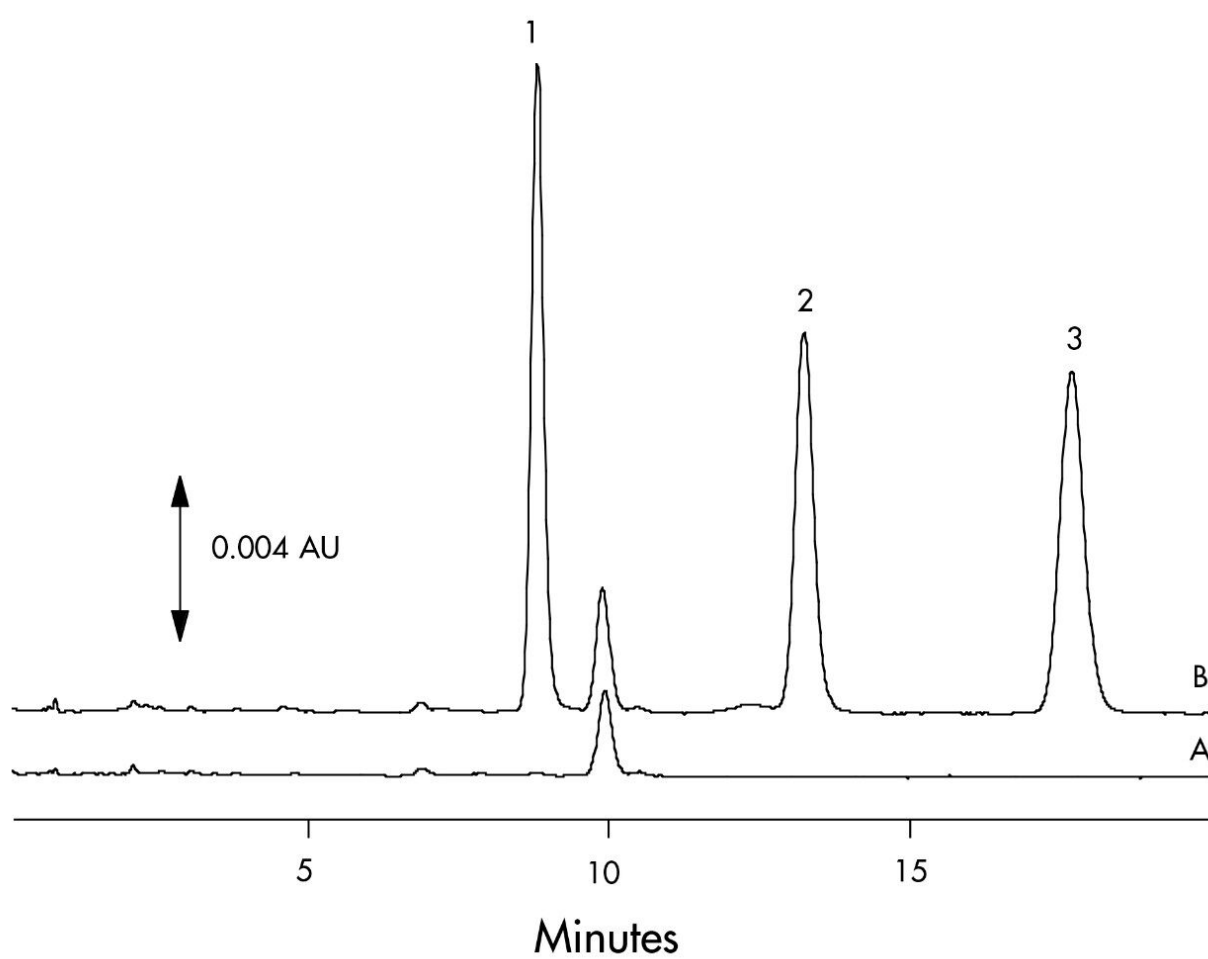
### **Oasis® HLB Extraction Method**

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

<b>Condition</b> 1 mL methanol/1 mL water
<b>Load</b> 1 mL spiked porcine serum with 10 µg/mL sulfathiazole (I.S.), 20 µL phosphoric acid
<b>Wash</b> 1 mL 5% methanol in water
<b>Elute</b> 1 mL methanol
<b>Evaporate and Reconstitute</b> 40 °C under nitrogen stream 1 mL mobile phase

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## Results and Discussion



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%

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WA31763.155, June 2003

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