

Application Report 87

Analysis of Antibiotic Sulfa Drugs Using Ascentis™ C18

This application demonstrates the suitability of Ascentis C18 for the efficient separation of the antibiotic sulfa drugs sulfanilamide, sulfacetamide, sulfadiazine, sulfathiazole, sulfamerazine, and sulfamethizole by HPLC

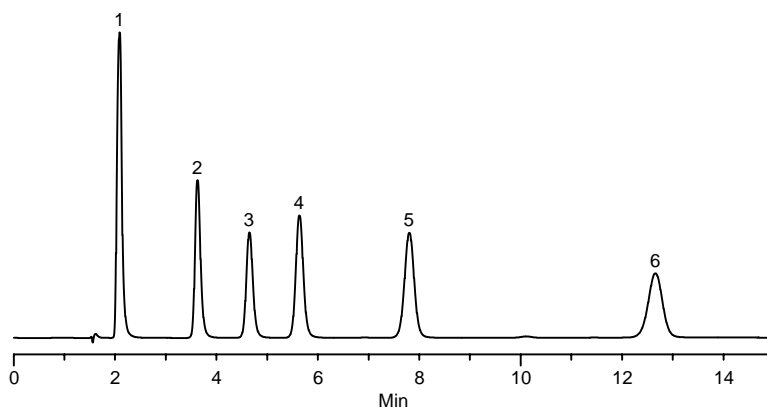
Key Words

Ascentis C18, sulfanilamide, 63-74-1, S9251, sulfacetamide, 144-80-9, S8627, sulfadiazine, 68-35-9, S8626, sulfathiazole, 72-14-0, S9876, sulfamerazine, 127-79-7, S8876, sulfamethizole, 144-82-1, S5632, 581324-U

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Acquisition System: Waters Alliance
2690 ID 9371

Notebook Reference: 1486-64



G002345

Conditions

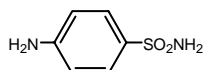
column: Ascentis C18, 15 cm x 4.6 mm I.D., 5 µm particles (581324-U)
mobile phase: 85:15, water with 1% acetic acid:methanol
flow rate: 1 mL/min.
temp.: 35 °C
det.: UV at 254 nm
injection: 10 µL
sample: 50 µg/mL each in mobile phase

Peak IDs

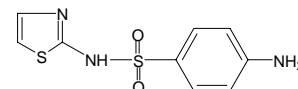
- | | |
|------------------|-------------------|
| 1. Sulfanilamide | 4. Sulfathiazole |
| 2. Sulfacetamide | 5. Sulfamerazine |
| 3. Sulfadiazine | 6. Sulfamethizole |

Structures

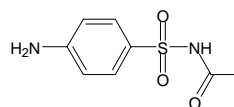
Sulfanilamide - G001249



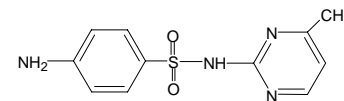
Sulfathiazole - G000597



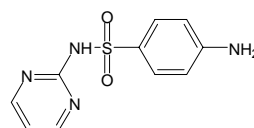
Sulfacetamide - G002347



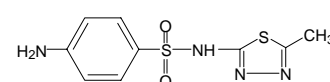
Sulfamerazine - G000598



Sulfadiazine - G002346



Sulfamethizole - G000600



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