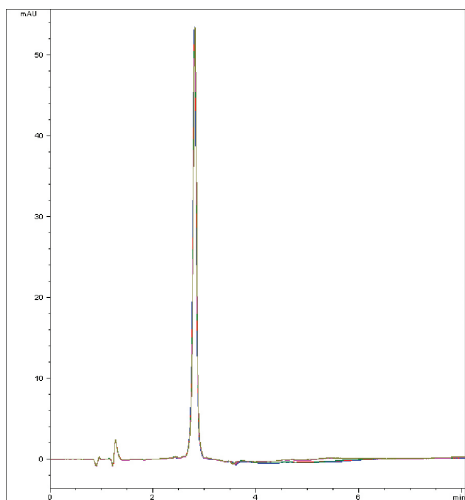
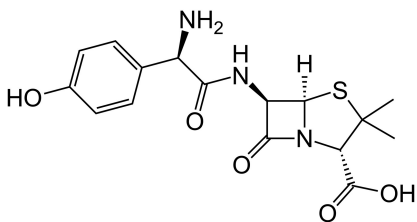


Amoxicillin

Orthogonal retention method to USP assay



Method Conditions

Column: Cogent Diamond Hydride™, 4µm, 100A
Catalog No.: 70000-7.5P
Dimensions: 4.6 x 75 mm
Solvents: A: DI water + 10 mM ammonium acetate
 B: 90% Acetonitrile/ 10% DI water/ 10 mM ammonium acetate

Gradient:

time (min.)	%B
0	100
4	90
5	100

Injection Vol.: 2 microL
Flow Rate: 1.0 mL/min
Detection: UV 230 nm
Sample: **Stock Solution:** 1 mg/mL amoxicillin trihydrate USP RS in 50/50 A/B diluent.
Working Solution: A 100 µL aliquot of the stock was diluted to 0.1 mg/mL using 900 µL 50/50 A/B diluent.
Peak: Amoxicillin
t₀: 0.95 min

Discussion

The USP assay method for amoxicillin is performed in reversed phase. Analysis by an orthogonal retention mode is very useful and can be readily done by aqueous normal phase (ANP) using solvents common to both retention modes. A benefit of the ANP method is the more symmetrical peak shape obtained. This is important for compounds such as amoxicillin that can give poor peak shapes in reversed phase.

For more information visit www.MTC-USA.com

Notes:
Amoxicillin is a beta-lactam antibiotic used to treat a variety of bacterial infections. Its mechanism of action is by inhibition of the synthesis of bacterial cell walls.

Cat. No.	Description
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70000-7.5P	Diamond Hydride™ HPLC Column, 100A, 4µm, 4.6 x 75 mm
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