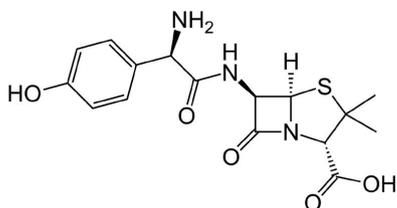
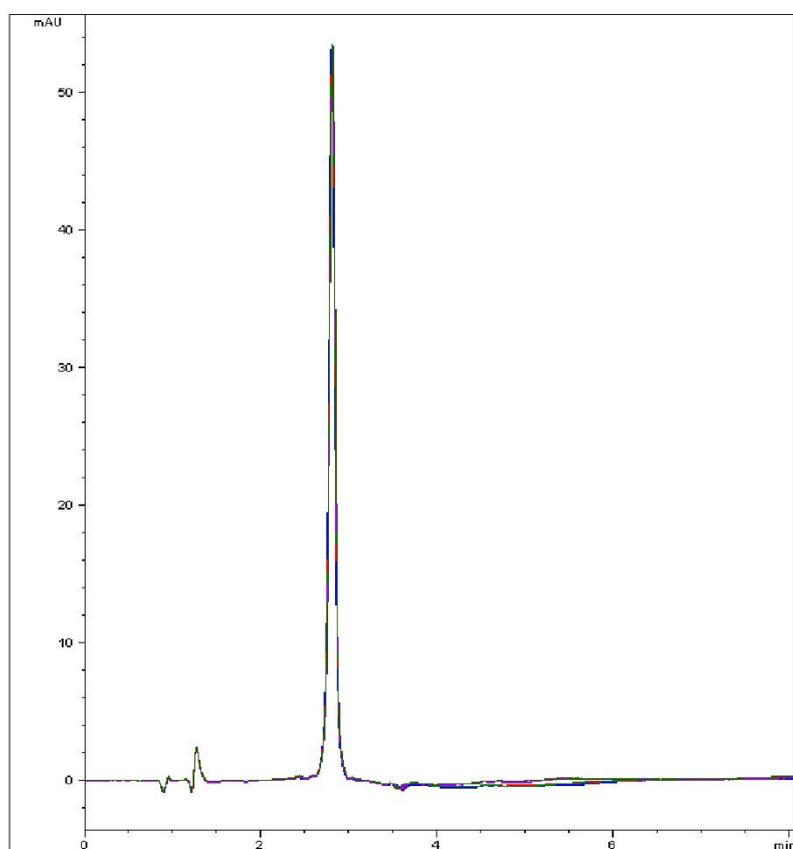


## Amoxicillin Analyzed Orthogonally with HPLC – AppNote

### Orthogonal Analysis to USP Assay Method for Validation

The USP Assay Method for the antibiotic 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) mode of HPLC, using solvents common to both.

A benefit of this Method is the more Symmetrical Peak Shape obtained. This is important for compounds such as Amoxicillin that can give poor Peak Shapes in many Reversed Phase Methods including the USP Monograph.



**Peak:**  
Amoxicillin

### Method Conditions

**Column:** Cogent Diamond Hydride™, 4µm, 100Å

**Catalog No.:** 70000-7.5P

**Dimensions:** 4.6 x 75mm

**Mobile Phase:**

A: DI Water / 10mM Ammonium Acetate

B: 90% Acetonitrile / 10% DI Water / 10mM Ammonium Acetate

**Gradient:**

| Time (minutes) | %B  |
|----------------|-----|
| 0              | 100 |
| 4              | 90  |
| 5              | 100 |

**Injection vol.:** 2 $\mu$ L

**Flow rate:** 1.0mL / minute

**Detection:** UV @ 230nm

**Sample Preparation:**

*Stock Solution:* 1mg / mL Amoxicillin Trihydrate USP RS in 50:50 Solvent A / Solvent B diluent.

*Working Solution:* A 100 $\mu$ L aliquot of the *Stock Solution* was diluted to 0.1mg / mL using 900 $\mu$ L 50:50 Solvent A / Solvent B diluent.

**t<sub>0</sub>:** 0.95 minutes

**Note:** 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.



**Attachment**

**No 135 Amoxicillin Analyzed Orthogonally with HPLC pdf** 0.2 Mb [Download File](#)