

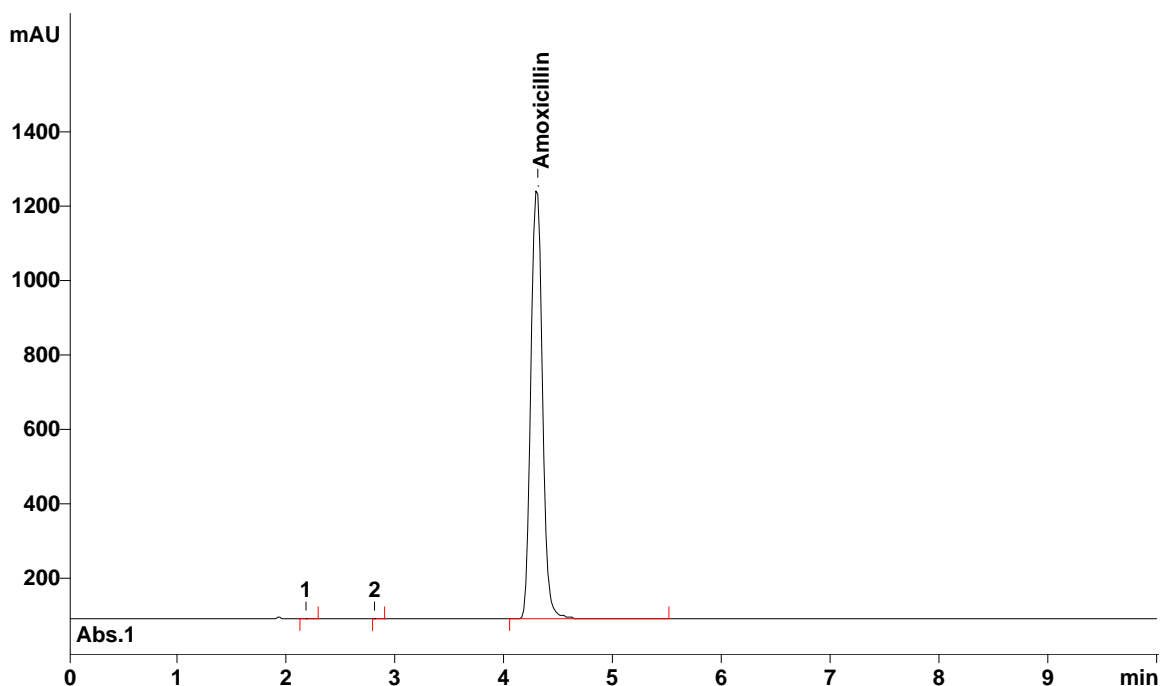
# IC Application Note No. U-30

**Title:** System suitability test for Amoxicillin according to USP

**Summary:** Determination of Amoxicillin according to USP 28-NF 23 (second supplement) using RP chromatography with UV detection.

**Sample:** Amoxicillin standard  
**Sample Preparation:** Dissolve 120 mg in 100 mL phosphate buffer pH=5.0

**Column:** 6.1008.100 Prontosil 120-5-C18 AQ 150  
**Wavelength:** 230 nm  
**Eluent:** 6.8 g/L sodium dihydrogen phosphate (pH = 5.0) / acetonitrile (96:4)  
**Flow:** 1.5 mL/min  
**Injection Volume:** 20 µL



<b>Chromatogram:</b>	Amoxicillin area %
	<b>99.8</b>

**Results:**

<b>Test factors</b>	<b>Value</b>	<b>Limit</b>	<b>Result</b>
Tailing factor	1.10	Less than 2.5	PASS
Theo. plates	7844	More than 1700	PASS
Capacity factor	1.23	1.1 to 2.8	PASS
Area RSD (n=6)	0.98%	Less than 2.0%	PASS
Height RSD (n=6)	0.53%	–	–
Retention time RSD (n=6)	0.20%	–	–